# *TRAINING PROGRAMME IN COMPUTER BASICS FOR DIETs AND IASE PERSONNEL OF RAJASTHAN*

PROGRAMME COORDINATOR

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READER IN PHYSICS

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# PREFACE

National curriculum framework for School Education (NCFSE) 2000 states that integration of information and communication technology into schooling, would demand that the educational planners, educational administrators, teacher educators and teachers looks beyond the current urban classrooms, devises updated plans for education in an electronic environment even in the far flung rural areas and expands their designs so that the computer becomes more than a subject of study Computers should be used in our day-to-day affairs, In Schools and Colleges Computers have at tremendous potential to be used as a teaching aid only This fact should be kept in mind that, Computers cannot replace a teacher To achieve this, it is necessary to train educational administrators, teacher educators & teachers in the basics of Computer So that they can understand the potential of new technology and effectively take part in changing the traditional learning atmosphere to a climate of exploration, problem solving and decision making as well as from prescriptive classroom teaching to participatory decentralized, interactive group of learning The new courses should help teachers to acquire skills of using information technology as well as making the best use of Computer technology in curriculum transaction

To achieve the above objectives a ten days training program was organized at Regional Institute of Education, Ajmer from 6<sup>th</sup> Oct to 15<sup>th</sup> Oct 2003 for the Principals / Vice Principals / Lecturers working at various DIETs & IASE of Rajasthan This program was undertaken at the request of the Education Department of the state of Rajasthan

The methodology that was followed during the program enabled the participants to become Computer literate so as to carry out the Computer related activities of DIETs & IASE's

The main objective of this program was to train the participants to make use of computers in their day-to-day work quite effectively and independently. The following areas were covered during the program and the emphasis was more on

1

practical work than on theory. The participants were trained in the Basic of Computers, hardwares and selected appropriate softwares Use of selected application softwares such as MS-Word, MS-Excel, MS-PowerPoint, Use of multimedia and how run a program through Compact disk, use of floppy disk to store / save the program and the use of Internet to surf a given web site and the E-mail facilities. The participants were trained to undertake some applications like arranging order of merit etc ,will be used by them on their day-to-day work

Participant s were given photocopies of essential lecturers and practical sessions & these consisted of materials prepared at the institute and those procured from N C E R T modules, Windows 98 user manual and office 2000 user manual/help.

Each day was divided into four sessions Two sessions were devoted to theoretical discussions and on curriculum transaction, in Computer laboratory through the use of multimedia projection facility available at the Institute Remaining two sessions were laboratory session for hands on experiences with computers

They were also trained to take care & repair / solve the minor problem, (cleaning dust from the mouse) pertaining to the computers
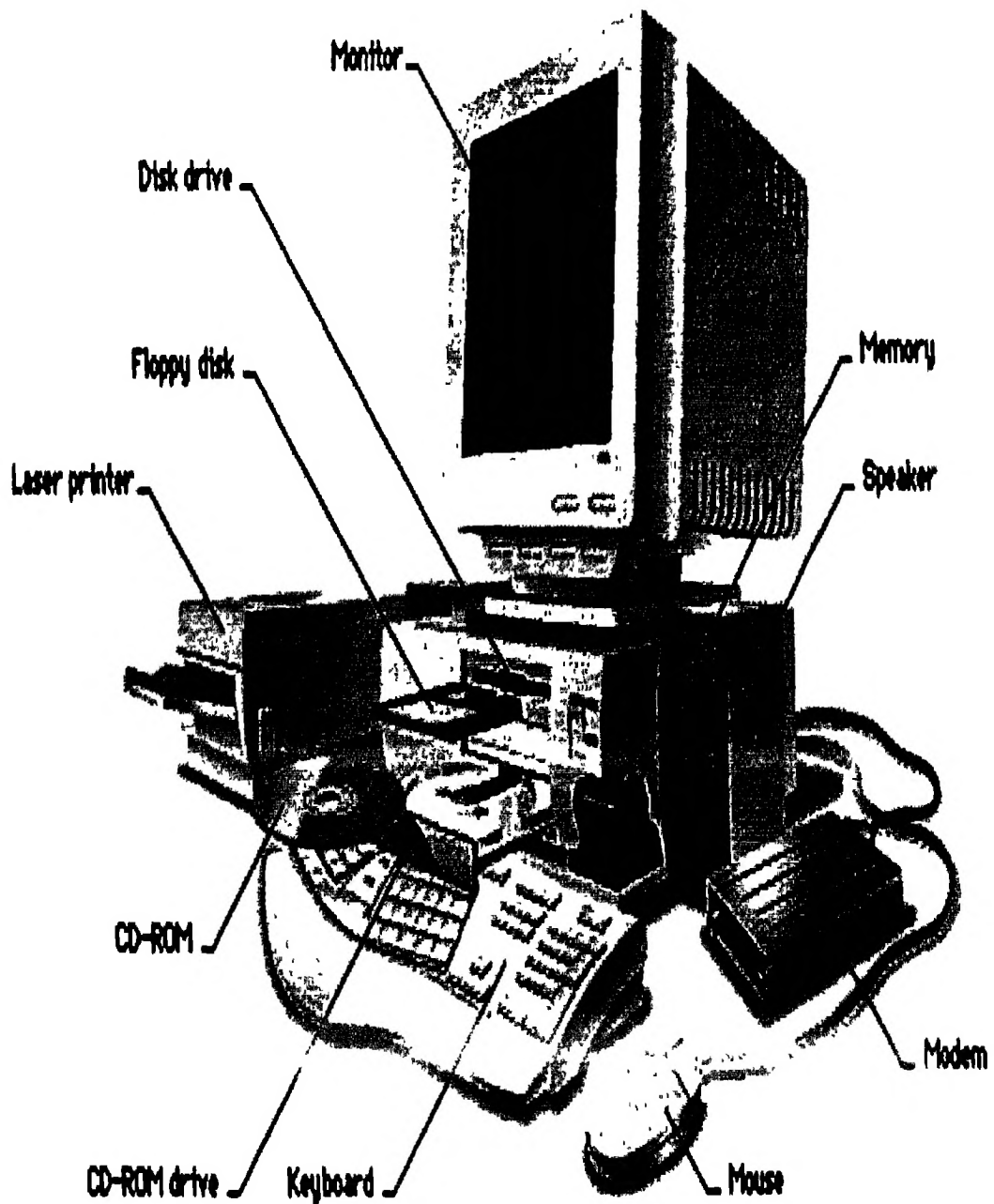
Special emphasis was given to use the modules developed by National Center for Computer Educations & Technological Aids – 2000 (Department of Computer Education) N C E R T, New Delhi in Computer literacy

The program proceeded as per schedule & according to the time table I am thankful to Principal Prof A B Saxena, Dr K B Rath, and Shri B C Kumawat for their whole hearted support in conducting the program Thanks are due to college administrative staff, Caretaker, Staff of the Extension department, Photocopy section for their Co-operation
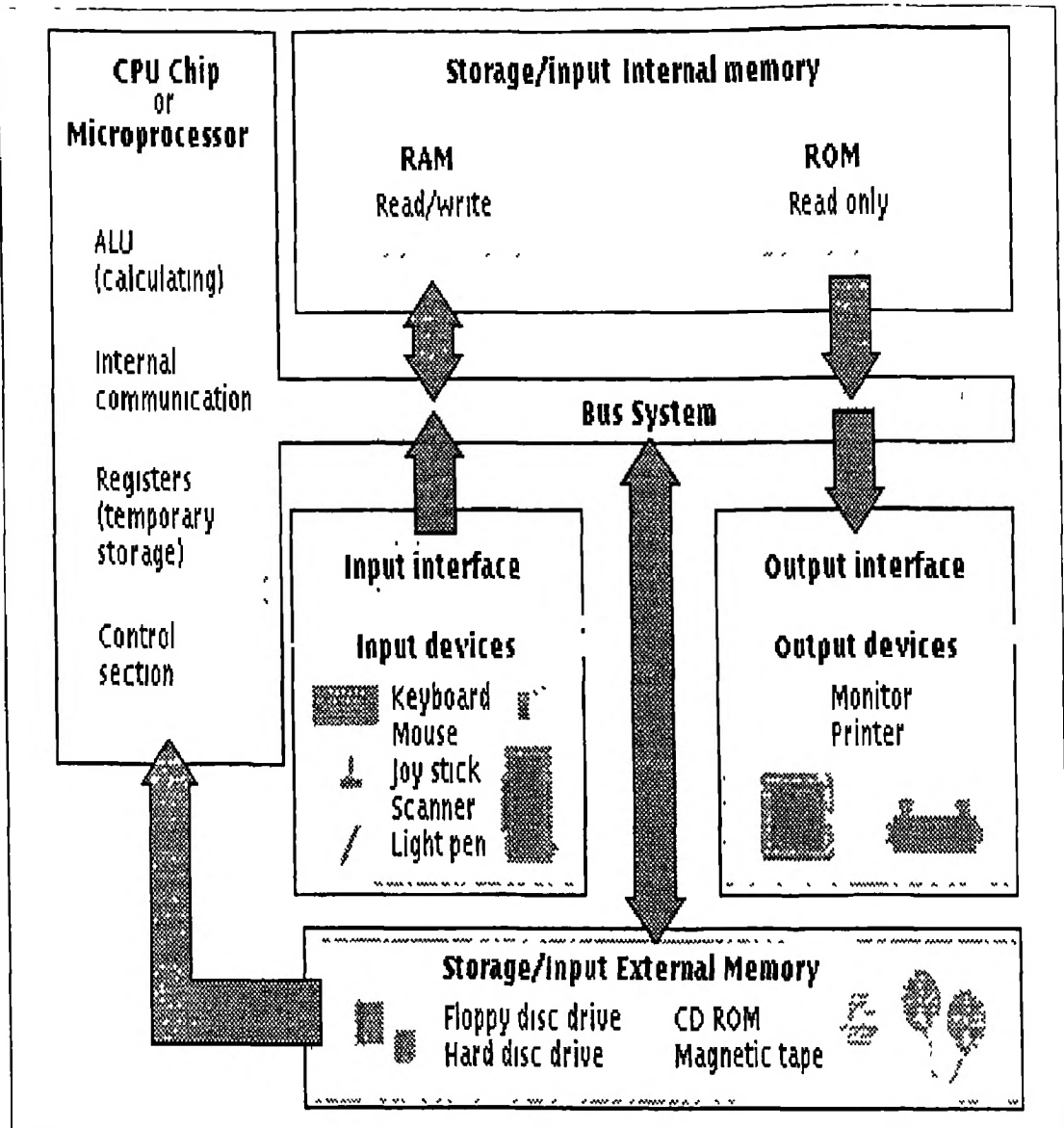
<div align="right">
Dr S K Paradkar<br>
(Program Co-ordinator)
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2

# Components Of A Personal Computer

A typical personal computer has components to display and print information (monitor and laser printer); input commands and data (keyboard and mouse); retrieve and store information (CD-ROM and disk drives); and communicate with other computers (modem).

Monitor

Disk drive

Floppy disk

Laser printer

Memory

Speaker

CD-ROM

CD-ROM drive   Keyboard

Modem

Mouse

# Computer System

**CPU Chip or Microprocessor**

ALU (calculating)

Internal communication

Registers (temporary storage)

Control section

**Storage/input Internal memory**

RAM — Read/write

ROM — Read only

**Bus System**

**Input interface**

**Input devices**

Keyboard
Mouse
Joy stick
Scanner
Light pen

**Output interface**

**Output devices**

Monitor
Printer

**Storage/Input External Memory**

Floppy disc drive
Hard disc drive

CD ROM
Magnetic tape

A typical computer system consists of a central processing unit (CPU), input devices, storage devices, and output devices. The CPU consists of an arithmetic/logic unit, registers, control section, and internal bus. The arithmetic/logic unit carries out arithmetical and logical operations. The registers store data and keep track of operations. The control unit regulates and controls various operations. The internal bus connects the units of the CPU with each other and with external components of the system. For most computers, the principal input device is a keyboard. Storage devices include external floppy disc drives and internal memory boards. Output devices that display data include monitors and printers.

# UPS Dos and Don'ts

✓ Do treat your UPS right. You'll wear your UPS out before its time, if you run it beyond its specifications. Like any chemical battery, the battery in your UPS will eventually wear out. But if you treat it well, it should last for at least 4 to 5 years.

✓ Do let the UPS to be charged fully before you put any devices on it. Leave it plugged in before you put it into use, for at least 8 hours or charge it for the time specified in the user manual.

✓ Do check your UPS every year by unplugging it from the wall. First disconnect your computer from the unit, and connect a lamp or bulb. The UPS should cut over to battery power instantly. Most UPSs have an alarm that should sound as well. If the UPS doesn't work, then the battery has failed and it needs replacement or repair.

✗ Don't plug a laser printer, copier, laser fax or any other heat-based printing device into the UPS. During warm-up and printing, these devices can draw hundreds of watts, and this could fry the circuitry.

✗ Don't use your UPS as a general-purpose power strip; power tools, space heaters, and many other high-drain high-noise devices can damage it.

✗ Don't plug extras into the UPS that you don't depend on for your work—like your speakers, desk lamp or inkjet printer. These devices will drain needed power in the event of a power loss, reducing your run-time.

✗ When getting a "lighter" version of a UPS, don't mistakenly buy an expensive surge-protector. Most UPS will also "condition" lines, which is helpful in maintaining the health of your electronic devices. Look for the keyword "UPS."

# 101 *GREAT* EDUCATIONAL USES FOR YOUR HANDHELD COMPUTER

❖ <u>Administrative Applications</u>

1. Keep your schedule
2. Track student progress on specific skills
3. Conduct authentic assessment
4. Use a calculator
5. Make a database of key content and concepts for student use
6. Take attendance
7. Instantly access student information, such as schedules, demographics, or parent contacts
8. Organize your reading lists
9. Take notes at a meeting or in a class
10. Record and tabulate grades
11. Track computer hardware and software inventory
12. Enhance school safety with bar code IDs and an emergency management system
13. Store and access lesson plans
14. Use a rubric to assess and score student work
15. Access a database of curriculum standards and related curriculum resources
16. Keep an inventory of books and other instructional materials
17. Store and track student IEPs
18. Track technical support requests
19. Keep a list of all your important contacts
20. Evaluate teacher performance and record observation notes
21. Access, track, and manage library book or textbook inventories
22. Track, organize, and control inventories and safety information for chemicals in the lab
23. Let students have constant access to their current grades (very motivating!)
24. Track teacher recruiting activities
25. Access human resources benefits information
26. Look up technical troubleshooting information
27. Keep emergency procedures and checklists readily accessible

## ❖ Communication and Collaboration Applications

28. Send an email
29. Group schedule school meetings
30. Collaborate on a graphic organizer
31. Send or receive a fax
32. Make a presentation
33. Make a phone call
34. Distribute school activity information to students and parents
35. Exchange information with a colleague
36. Share a downloaded web page with someone
37. Send assignment information home to parents
38. Have students turn in an assignment electronically
39. Get parents' sign-offs
40. Transfer a file from your PC for instant access
41. Write an ebook and share it with others
42. Take an online course
43. Send and receive instant messages
44. Conduct group writing activities
45. Record voice notes
46. Transmit close captioning of lectures for the hearing impaired
47. Access online educational events and news

## ❖ Teaching and Learning Applications

48. Take and store digital photos for a project
49. Make a spreadsheet
50. Draw a picture
51. Make a concept map summarizing a chapter
52. Form, visualize, and solve equations
53. Keep track of your class schedules, assignments, and grades
54. Record observations on a field trip
55. Read an ebook
56. Find locations with a GPS
57. Study and compose music
58. Graph data
59. View and use maps
60. Increase content accessibility for those with disabilities
61. Gather data on temperature, light, voltage, pH, and more with data probes
62. Program your own handheld application

63. Conduct a surveying expedition
64. Look up a word in a dictionary
65. Use flashcards
66. Use a tutorial for self-study
67. Conduct a stock market simulation
68. Take notes and write a research paper
69. Take notes in class
70. Practice handwriting
71. Study a foreign language
72. Listen to historic speeches
73. Take part in a collaborative simulation
74. Do research on the web
75. Conduct an academic competition
76. Gather and analyze data on environmental issues
77. Make a timeline
78. Look up a word in a thesaurus
79. Create an outline
80. Study for a test
81. Give students step-by-step instructions or visual plans for projects
82. Keep a journal
83. Create fitness records for students
84. Access writing prompts and editing checklists
85. Learn to read and write Japanese characters
86. Learn about concepts in measurement
87. Practice multiplication tables
88. Access the periodic table
89. Manage a collaborative project
90. Look at reference diagrams on parts of the human body
91. Make a photo album
92. Listen to and study classical music
93. Build a robot controlled by a handheld device
94. Track a community service learning project
95. Read about the latest current events

97. Build vocabulary through word games
98. Find or create a geocache
99. Have classes create their own mobile information channels to share information with other classes or the community
100. Create a database of endangered species
101. Read historical primary source documents

# MS-DOS COMMANDS

| INTERNAL COMMANDS | EXTERNAL COMMAND |
|---|---|
| 1. DATE | 1. CHKDSK |
| 2. TIME | 2. DISKCOPY |
| 3. CLS | 3. FORMAT |
| 4. DIR | 4. XCOPY |
| 5. MD | 5. UNDELETE |
| 6. CD | 6. MORE |
| 7. RD | 7. SORT |
| 8. DEL | 8. EDIT |
| 9. COPY CON | 9. UNFORMAT |
| 10. COPY | 10. TREE |
| 11. TYPE | 11. DISKCOMP |
| 12. REN | 12. DELTREE |
| 13. VER | 13. LABEL |
| 14. VOL | 14. FIND |
| 15. PROMPT | 15. PRINT |
| 16: EXIT | |

<u>COMMAND PROMPT</u>:-

    **C : \ >** This is called the command prompt. The flashing underscore next to the command prompt is called the cursor.

<u>MS-DOS</u>:- MS-DOS stands for Microsoft disk operating system. This is system software. It is developed by Microsoft company. There are two types of MS-DOS commands:-
1. Internal commands 2. External commands

1. **Internal Commands**: - Those commands that are transferred to main memory(RAM) at the time of booting and there is no need of any file to execute them are called internal commands Internal commands are exists in COMMAND.COM file.

1 DATE: - This command is used to display the system date and prompts you to change the date if necessary.
    Syntax: DATE

2 TIME: - This command is used to display the system time and prompts you to change the time if necessary.
    Syntax: TIME

3 CLS - This command is used to clear the screen.
    Syntax: CLS

4. DIR - This command is used to displays a list of the files and subdirectories that are in the directory you specify.
    Syntax: DIR [drive:][path][file name][/P][/W][/O[N/E/D/S]][/L]

5. MD or MKDIR: - This command is used to create a new (multilevel) directory structure.
    Syntax: MD [drive:][path]directory name
    MKDIR [drive:][path]directory name

6. CD or CHDIR: - This command is used to changes the current directory and displays the name of the current directory.
    Syntax: CD [drive:][path]directory name
    CHDIR [drive:][path]directory name
    CHDIR [..]

7. RD or RMDIR: - This command is used to delete(remove) a directory. The directory must be empty except for the . and .. symbols.
    Syntax: RD [drive:][path]directory name
    RMDIR [drive:][path]directory name

8. DEL or ERASE: - This command is used to deletes the files you specify.
    Syntax: DEL [drive:][path][filename]
    ERASE [drive:][path][filename]

9. COPY CON: - This command is used to create a new file with the help of console (keyboard).
    Syntax: COPY CON [file name]
    [Message]
    F6 key or CTRL + Z

10. COPY:- This command is used to copy one or more files to the location you specify.
    Syntax: COPY [source] [destination]

11. TYPE:- This command is used to displays/view the contents of a text file without modifying it.
    Syntax: TYPE [drive:][path]filename

12. REN or RENAME :- This command is used to changes/rename the name of the file or files you specify.
    Syntax: REN [drive:][path]filename1 filename2
    RENAME [drive:][path]filename1 filename2

13. VER:- This command is used to display the MS-DOS version number.
    Syntax: VER

14. VOL:- This command is used to displays the disk volume label and serial number, if the disk has them.
    Syntax: VOL

1

15. PROMPT:- This command is used to changes the appearance of the command prompt(C \>)

    Syntax PROMPT [text]      here text may be $Q,$t,$D,$P,$G,$L

16 EXIT.- This command is used to quits the MS-DOS command interpreter(COMMAND.COM) and returns
    the program (windows) that started the command interpreter.

    Syntax - EXIT      :

**2. External Command**.- Those commands that are not transferred to main memory (RAM) at the time of boot
        and exists on disk are called external commands There must be available special fill
        for each command on disk

1 CHKDSK :- This command is used to checks the status of a disk and displays a status of a disk and displays
    status report Can also fix disk errors
    Syntax. CHKDSK

2 DISKCOPY - This command is used to copies the entire contents of one floppy disk to another floppy disk
    Syntax DISKCOPY drive1 drive2·

3 FORMAT - This command is used to formats a disk It delete all data on the disk and makes new tracks an
    sectors on disk
    Syntax -

4 XCOPY·- This command is used to copies directories, their subdirectories, and files(except hidden and syst
    files)
    Syntax XCOPY source destination /E

5 UNDELETE - This command is used to restores files that were previously deleted by using the DEL comma
    Syntax - UUNDELETE filename

6. MORE·- This command is used to view long text file. This command displays one screen of output at a tim
    Syntax - MORE < filename

7. SORT. - This command is used to rearranging characters in ascending or descending order
    Syntax· SORT [/r] [<] filename

8 EDIT.- This command is used to create and edit ASCII text files This is a text editor
    Syntax · EDIT filename

9 UNFORMAT - This command is used to restores a disk that was erased by using the format command
    Syntax - UFORMAT drive .

10 TREE.- This command is used to graphically displays the structure of a directory.
    Syntax TREE

11 DISKCOMP.- This command is used to compares the contents of two floppy disks
    Syntax· DISKCOMP drive1. drive2·

12 DELTREE.- This command is used to deletes a directory and all the files and subdirectories that are in it
    Syntax -

13 LABEL.- This command is used to creates, changes, or deletes the volume label (name) of a disk
    Syntax - LABEL

14 FIND·- This command is used to searches for a specific string of text in a file or files.
    Syntax. FIND "string" filename

15 PRINT.- This command is used to print a text file.
    Syntax - PRINT filename

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CHANGING DRIVES To change from C (for hard disk) to A. or B (for floppy disk) type the following at
      command prompt  A or B·
      To change from A or B· to C. type C. at command prompt

# Windows Basic

## Windows

Windows, in computer science, personal computer operating system sold by Microsoft Corporation that allows users to enter commands with a point-and-click device, such as a mouse, instead of a keyboard An operating system is a set of programs that control the basic functions of a computer The Windows operating system provides users with a graphical user interface (GUI), which allows them to manipulate small pictures, called icons, on the computer screen to issue commands Windows is the most widely used operating system in the world It is an extension of and replacement for Microsoft's Disk Operating System (MS-DOS)

The Windows GUI is designed to be a natural, or intuitive, work environment for the user With Windows, the user can move a cursor around on the computer screen with a mouse By pointing the cursor at icons and clicking buttons on the mouse, the user can issue commands to the computer to perform an action, such as starting a program, accessing a data file, or copying a data file Other commands can be reached through pull-down or click-on menu items The computer displays the active area in which the user is working as a window on the computer screen The currently active window may overlap with other previously active windows that remain open on the screen This type of GUI is said to include *WIMP* features *w*indows, *i*cons, *m*enus, and *p*ointing device (such as a mouse)

Computer scientists at the Xerox Corporation's Palo Alto Research Center (PARC) invented the GUI concept in the early 1970s, but this innovation was not an immediate commercial success In 1983 Apple Computer featured a GUI in its Lisa computer This GUI was updated and improved in its Macintosh computer, introduced in 1984

Microsoft began its development of a GUI in 1983 as an extension of its MS-DOS operating system Microsoft's Windows version 1 0 first appeared in 1985. In this version, the windows were tiled, or presented next to each other rather than overlapping Windows version 2 0, introduced in 1987, was designed to resemble IBM's OS/2 Presentation Manager, another GUI operating system Windows version 2 0 included the overlapping window feature The more powerful version 3 0 of Windows, introduced in 1990, and subsequent versions 3 1 and 3 11 rapidly made Windows the market leader in operating systems for personal computers, in part because it was prepackaged on new personal computers It also became the favored platform for software development

In 1993 Microsoft introduced Windows NT (New Technology). The Windows NT operating system offers 32-bit multitasking, which gives a computer the ability to run several programs simultaneously, or in parallel, at high speed. This operating system competes with IBM's OS/2 as a platform for the intensive, high-end, networked computing environments found in many businesses.

In 1995 Microsoft released a new version of Windows for personal computers called Windows 95 Windows 95 had a sleeker and simpler GUI than previous versions It also offered 32-bit processing, efficient multitasking, network connections, and Internet access Windows 98, released in 1998, improved upon Windows 95

In 1996 Microsoft debuted Windows ME, a scaled-down version of the Microsoft Windows platform designed for use with handheld personal computers Windows 2000, released at the end of 1999, combined Windows NT technology with the Windows 98 graphical user interface

Other popular operating systems include the Macintosh System (Mac OS) from Apple Computer, Inc, OS/2 Warp from IBM (*see* OS/2), and UNIX and its variations, such as Linux

<u>Steps to shut down your computer</u>

1    Click **Start**, and then click **Shut Down**
2    In the **What do you want the computer to do?** list, click **Shut down**

Important

• Do not turn off your computer until a message appears telling you that it is safe to do so. Windows 2000 stores important data in memory while the system is running, and needs to write the data to the hard disk before you turn off the computer. After the data is saved, Windows 2000 notifies you that it is okay to turn off the computer

Note

• You can also shut down your computer by pressing CTRL+ALT+DELETE, clicking **Shut Down**, and then clicking **Shut down** in the **What do you want the computer to do?** list
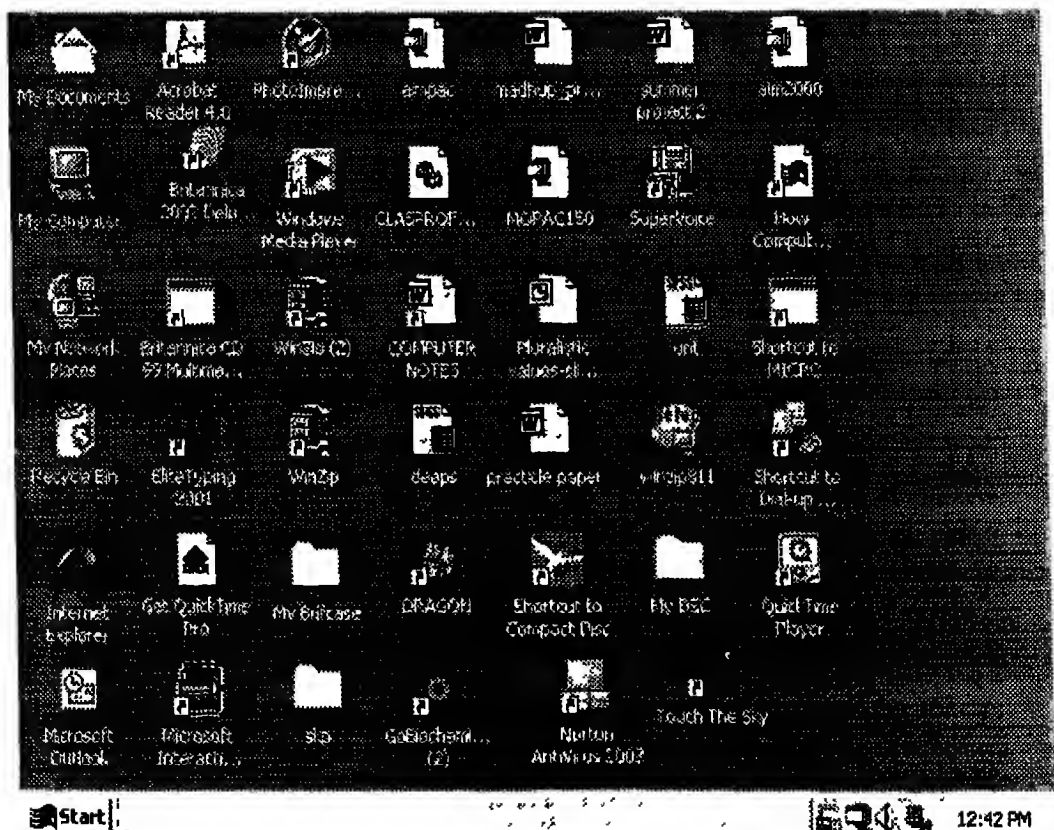
<u>Steps to restart your computer</u>

1    Click **Start**, and then click **Shut Down.**
2    In the **What do you want the computer to do?** list, click **Restart**

Note

• You can also restart your computer by pressing CTRL+ALT+DELETE, clicking **Shut Down**, and then clicking **Restart** in the **What do you want the computer to do?** list

<u>Desktop Screen</u>

## To open a file or folder

1. Open    My Computer. and then double-click the drive that contains the file
2. Double-click the file or folder you want to open

Notes

- To open My Computer, double-click its icon on the desktop
- To open a file or folder by using Windows Explorer, click **Start**, point to **Programs**. point to **Accessories**, click **Windows Explorer**. and then double-click the file or folder you want to open
- If the file you want to open is not associated with a particular program, you can select the program used to open the file by right-clicking the file, clicking **Open With**, and then selecting the name of the program
- You can use commands on the **View** menu to change the way files are displayed You can also use the **View** tab in the **Folder Options** dialog box to change file and folder settings

## To save a file

1. On the **File** menu of the program you are working in, click **Save**
2. If you haven't saved your file before, type a name for the file in **File name**

To save a file with a different name or format

1. On the **File** menu of the program you are working in, click **Save As**.
2. Specify a new name or a different format for the file you are saving

Note

- If the file was previously saved with a different name or format, that version will remain unchanged

## To create a new folder

1. Open Windows Explorer
2. Click the drive or folder in which you want to create a new folder
3. On the **File** menu, point to **New**, and then click **Folder**
4. Type a name for the new folder, and then press ENTER

Note

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**. and then click **Windows Explorer**
- You can also create a new folder by right-clicking a blank area in the right pane of Windows Explorer or on the desktop, pointing to **New**, and then clicking **Folder**

## Organizing files using folders

Folders    provide a useful way to organize the files on your system, providing logical places to create and store your files Create folders for categories that match the way you want to organize your information, then save your files in the most appropriate folder You can move files from other locations, such as another folder or a network drive or share, to new folders you create You can even create folders within folders Your files are easier to find when you organize them this way

You can create a folder from almost anywhere in Windows 2000 Windows 2000 places the new folder in your current location However, you can move the folder to any location at a later time

## Desktop overview

The desktop, which is the screen that you see after you log on to Windows 2000, is one of the most important features on your computer The desktop can contain shortcuts to your most frequently used programs, documents, and printers The desktop can also be the home of active content such as a news or travel channel

To adjust settings such as desktop color and background, right-click any empty area on the desktop, and then click **Properties**

By default, the desktop is home to the following features

### Taskbar

The taskbar appears at the bottom of your screen The taskbar contains the **Start** button, which you can use to quickly start a program, find a file, or access Help

When you open a program, document, or window, a button appears on the taskbar for each item Use the buttons to quickly switch from one open window to another

Minimize all open windows and access the desktop with one click of the **Show Desktop** button on the taskbar

### My Documents

Use this folder as the default storage location for documents, graphics, and other files, including saved Web pages Each user who logs on to the computer has a unique My Documents folder, so the documents you store in your My Documents folder are not readily available to another person who uses the same computer

### My Computer

Use this folder to quickly see the contents of your floppy disk, hard disk, CD-ROM drive, and mapped network drives From within My Computer, you can also open Control Panel, where you can configure many settings on your computer

### My Network Places

Use this folder to locate shared resources on the entire network to which your computer is connected Shortcuts to the computers, Web servers, and FTP servers where you've accessed documents or programs are automatically created in My Network Places. You can also create shortcuts to network, Web, and FTP servers by using the Add Network Place wizard

If your computer is a member of a workgroup, you can double-click **Computers Near Me** to narrow your search to computers that are in the same workgroup.

### Recycle Bin

The Recycle Bin stores deleted files, folders, graphics, and Web pages until you empty the bin. If you want to retrieve an item that you have deleted, look in the Recycle Bin

### Internet Explorer

Using an Internet connection and Internet Explorer, you can browse the World Wide Web and your local intranet

1   Insert the floppy disk into the disk drive
2   Open        Windows Explorer
3   Click the file or folder you want to copy
4   On the **File** menu, point to **Send To**, and then click **3 1/2 Floppy (A)**

Notes

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories** and then click **Windows Explorer**
- You can also copy a file or folder to a floppy disk by right-clicking the file or folder pointing to **Send To**, and then clicking **3 1/2 Floppy (A)**

To send files [  ] other place quickly

1   Open [  ] Windows Explorer
2   Click the file you want to send
3   On the **File** menu, point to **Send To**, and then click the destination

Note

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories** and then click **Windows Explorer**

To change the [  ] e of a file or folder

1   Open [  ] Windows Explorer
2   Click the file or folder you want to rename
3   On the **File** menu, click **Rename**
4.  Type the new name, and then press ENTER

Notes

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**, and then click **Windows Explorer**
- You do not need to open the file or folder to rename it
- A file name can contain up to 215 characters, including spaces. However, it is not recommended that you create file names with 215 characters Most programs cannot interpret extremely long file names File names cannot contain the following characters
  \ / · * ? " < > |
- You can also rename a file or folder by right-clicking it and then clicking **Rename**
- The name of system folders such as Documents and Settings, Winnt, or System32 cannot be changed because they are required for Windows to run properly

To delete a file or folder

1   Open        Windows Explorer
2   Click the file or folder you want to delete
3   On the **File** menu, click **Delete**

Notes

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**, and then click **Windows Explorer**
- Deleted files remain in the Recycle Bin until you empty it unless you press and hold down SHIFT while dragging an item to the Recycle Bin. Then the item is deleted from your computer without being stored in the Recycle Bin
- If you want to retrieve a file you have deleted, double-click **Recycle Bin** on the desktop, right-click the file you want to retrieve, and then click **Restore**

For example, if you are in the My Documents folder and create a new folder, Windows 2000 places the new folder within the My Documents folder If you later decide you want to move the folder to a new location, you can easily move the folder and all the files it contains to the new location

To copy or move a file or folder

1  Open      Windows Explorer
2  Click the drive or folder you want to work with
3  Click the file or folder you want to copy or move
4  On the **Edit** menu, click **Copy** Or, click **Cut** to move the item
5  Open the folder or disk where you want to copy or move the item
6  On the **Edit** menu, click **Paste**

   Notes

   • To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories** and then click **Windows Explorer**
   • To select consecutive files or folders to copy or move, click the first item, press and hold down SHIFT, and then click the last item
   • To select files or folders that are not consecutive, press and hold down CTRL, and then click each item

To move a file or folder

1  Open      Windows Explorer
2  Click the file or folder you want to move
3  On the **Edit** menu, click **Cut**
4  Open the folder where you want to put the file or folder
5  On the **Edit** menu, click **Paste**

   Notes

   • To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**, and then click **Windows Explorer**
   • To select more than one file or folder to move, press and hold down CTRL, and then click the items you want
   • To select a consecutive group of files, click the first file, press and hold down SHIFT, and then click the last file

To move files by dragging

1  Open      Windows Explorer
2  Find the file or folder you want to move
3  Make sure the destination for the file or folder you want to move is visible
4  Drag the file or folder to the destination.

   Notes

   • To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**, and then click **Windows Explorer**
   • If you drag using the right mouse button, a menu appears with the commands **Move Here**, **Copy Here**, **Create Shortcut(s) Here**, and **Cancel** Click the command you want
   • To copy the item instead of moving it, press and hold down CTRL while dragging

To copy a file or folder to a floppy disk

5

- You can also delete files or folders by right-clicking the file or folder and then clicking **Delete**

To delete or restore files in the Recycle Bin

1. On the desktop, double-click **Recycle Bin**
2. Do one of the following
    - To restore an item, right-click it, and then click **Restore**
    - To restore all of the items, on the **Edit** menu, click **Select All**, and then on the **File** menu, click **Restore**
    - To delete an item, right-click it, and then click **Delete**
    - To delete all of the items, on the **File** menu, click **Empty Recycle Bin**

Notes

- Deleting an item from the Recycle Bin permanently removes it from your computer Items deleted from the Recycle Bin cannot be restored
- You can also delete items by dragging them into the Recycle Bin If you press SHIFT while dragging, the item is deleted from your computer without being stored in the Recycle Bin
- Restoring an item in the Recycle Bin returns that item to its original location.
- To retrieve several items at once, hold down CTRL, and then click each item that you want to retrieve When you have finished selecting the items that you want to retrieve, on the **File** menu, click **Restore**.
- If you restore a file that was originally located in a deleted folder, the folder is recreated in its original location, and then the file is restored in that folder
- The following items are not stored in the Recycle Bin and cannot be restored
    - Items deleted from network locations
    - Items deleted from removable media (such as 3 5-inch disks)
    - Items that are larger than the storage capacity of the Recycle Bin

To search for a file or folder

1. Click **Start**, point to **Search**, and then click **For Files or Folders**
2. In **Search for files or folders named**, type all or part of the file name or folder you want to find
3. To search for files containing specific text, in **Containing text**, type the text you want to find
4. In **Look in**, click the drive, folder, or network you want to search
5. To specify additional search criteria, click **Search Options**, and then click one or more of the following options to narrow your search
    - Select **Date** to look for files that were created or modified on or between specific dates
    - Select **Type** to look for files of a specific type, such as a text or WordPad document
    - Select **Size** to look for files of a specific size
    - Select **Advanced Options** to specify additional search criteria.
6. Click **Search Now**

Notes

- If you get too many results, try entering additional search criteria to make your search more specific
- To clear the search criteria fields and begin a new search, click **New**

Under Advanced Options, **Search slow files** refers to files that reside on removable storage media, such as optical or tape backup. These files may need to To create a shortcut in a folder

1. Open        Windows Explorer
2. In the Folders list, click the folder in which you want to create the shortcut
3. On the **File** menu, point to New, and then click **Shortcut**

4   Follow the instructions on your screen

Notes

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**, and then click **Windows Explorer**.
- Folders can also be opened by double-clicking the folder in the details pane on the right
- A shortcut is a quick way to start a frequently used program or open a file or folder without having to go to its installed location
- be copied to a faster storage medium before the contents can be searched

To put a shortcut on the desktop

1   Open      Windows Explorer
2   Click the item, such as a file, program, folder, printer, or computer, for which you want to create a shortcut
3   On the **File** menu, click **Create Shortcut**
4   Drag the shortcut icon from Windows Explorer onto the desktop

Notes

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**, and then click **Windows Explorer**
- You can use the shortcut as a fast way to open the item
- To change any settings for the shortcut, such as the kind of window it starts in or the key combination that opens it, right-click the shortcut, and then click **Properties**
- When you delete a shortcut, the original item still exists on the disk
- You can also drag the item to the desktop with the right mouse button, and then click **Create Shortcut(s) Here**

## Using Internet Explorer

With Internet Explorer and an Internet connection, you can search for and view information on the World Wide Web You can type the address of the Web page that you want to visit into the address bar, or click an address from your list of Favorites. Internet Explorer also lets you search the Internet for people, businesses, and information about subjects that interest you. Internet Explorer security features let you browse the Web with confidence, knowing that your computer and personal information are safe

Open      Internet Explorer

View      Internet Explorer Help

Notes

- To open Internet Explorer, click **Start**, point to **Programs**, and then click **Internet Explorer**

If you are using search on the Internet

1   Click **Start**, point to **Search**, and then click **On the Internet**
2   Under **Choose a category for your search**, click the category you would like to search Click **More** to see additional search categories
3   Enter your search criteria, and then click **Search**

If you do not get any results, try removing some of the search criteria to make your search more general

4   In the list of search results, click a link to display the Web page

Notes

- To clear the search criteria fields and begin a new search, click **New**
- For each Search category, the Search window provides access to several Internet search services  In the Search window, click **Next**, and the next search service in the list will perform your search  To view the list of available search services for the selected search category, click the arrow to the right of **Next**
- You can customize the list of available search services and other aspects of how your computer performs Internet searches by clicking **Customize** in the Search window
- If you want to find information quickly, you can type **go**, **find**, or **?** followed by the text you want to search for, in the address bar of Internet Explorer

To start a program

- Click **Start**, point to **Programs**, locate the program you want to start, and then click it

Notes

- After you start a program, a button representing the program appears on the taskbar  To switch from one running program to another, click its taskbar button.
- If a program doesn't appear on the **Programs** menu or one of its submenus, you can perform a search for it, create a shortcut, and then drag the shortcut to the **Start** or **Programs** menu

To quit a program

- On the **File** menu of the program you are using, click **Exit**

Note

- You can also quit a program by clicking  cross symbol at the far right of the title bar

To switch between running programs

- Click a program's button on the taskbar

Notes

- If you cannot see the taskbar, you may have the Auto hide feature turned on  To redisplay the taskbar, point to the area of your screen where the taskbar is located
- You can also switch to the last open program or document by pressing ALT+TAB, or cycle through open windows by holding down ALT and repeatedly pressing TAB

To customize the taskbar or Start menu

1   Click **Start**, point to **Settings**, and then click **Taskbar & Start Menu**
2   In the **Taskbar and Start Menu Properties** dialog box, make the changes you want on the **General** and **Advanced** tabs

Note

- To open the **Taskbar and Start Menu Properties** dialog box, right-click an empty area on the taskbar, and then click **Properties**

## To display the taskbar

- If the taskbar is hidden, click **Start**, point to **Settings**, click **Taskbar & Start Menu**. and then clear the **Auto hide** check box
- If you have temporarily hidden the taskbar by dragging the top edge down, drag the visible edge upward to redisplay the taskbar

Note

- To open the **Taskbar Properties** dialog box, right-click an empty area on the taskbar. and then click **Properties**.'

## To minimize or maximize a window or restore it to its previous size

- Click the appropriate button in the upper right corner of the window
  - o Click -- to minimize the window to a taskbar button To restore the minimized window to its previous size, click its taskbar button
  - o Click☐ to display the window in a full screen
  - o After maximizing a window, click ☐ to restore the window to its previous size

Notes

- You can also double-click the window's title bar to maximize it or restore it to its previous size
- To minimize all open windows and dialog boxes, click    on the taskbar Minimized windows appear as buttons on your taskbar, but dialog boxes do not  Click again to restore all windows and dialog boxes to their previous size

## To close a window or a taskbar button

- To close a window, click cross symbol in the upper right corner of the window
- To close a taskbar button, right-click the taskbar button, and then click **Close**

## To put a shortcut on the desktop

1. Open    Windows Explorer
2. Click the item, such as a file, program, folder, printer, or computer, for which you want to create a shortcut
3. On the **File** menu, click **Create Shortcut**
4. Drag the shortcut icon from Windows Explorer onto the desktop

Notes

- To open Windows Explorer, click **Start**, point to **Programs**, point to **Accessories**. and then click **Windows Explorer**
- You can use the shortcut as a fast way to open the item
- To change any settings for the shortcut, such as the kind of window it starts in or the key combination that opens it, right-click the shortcut, and then click **Properties**
- When you delete a shortcut, the original item still exists on the disk
- You can also drag the item to the desktop with the right mouse button, and then click **Create Shortcut(s) Here**

## To set the mouse to single-click or double-click

1. Open    Mouse in Control Panel
2. On the **Buttons** tab, under **Files and Folders**. select one of the following

o **Single-click to open an item** allows you to point to an item to select it and click once to open it
o **Double-click to open an item** allows you to click once to select an item and double-click to open it

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- **Single-click to open an item** enables you to click once in many places where you would normally double-click For example, you can click an icon to start a software program

To adjust the double-click speed for your mouse

1 Open      Mouse in Control Panel
2 On the **Buttons** tab, under **Double-click speed**, drag the slider

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- To test the speed, double-click the image in the test area

To reverse your mouse buttons

1 Open      Mouse in Control Panel
2 On the **Buttons** tab, under **Button configuration**, click **Right-handed** or **Left-handed**

Note

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon

To change the appearance of your mouse pointer

1 Open      Mouse in Control Panel
2 Click the **Pointers** tab
3 You may choose one or both of the following
    o Under **Scheme**, click a scheme to change all of your pointers at one time
    o To change only one pointer, select it in the list of specific tasks and the pointers associated with them Click **Browse**, and then double-click the name of the new pointer you want to use for that task

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- A pointer scheme is any combination of pointers used on your desktop You can customize any number of pointers and then save them as a new scheme by clicking **Save As** The new scheme will appear in the list under **Scheme**
- To remove a pointer scheme, click it under **Scheme**, and then click **Delete**

To change your screen resolution

1 Open      Display in Control Panel
2 On the **Settings** tab, under **Screen area**, drag the slider, and then click **Apply**

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- A higher screen resolution reduces the size of items on your screen and increases the size of your desktop
- Your monitor and display adapter determine whether you can change your screen resolution

## To change the number of colors displayed on a monitor

1  Open      Display in Control Panel
2  On the **Settings** tab, if you are using multiple monitors, click the monitor icon that represents the monitor that you want to adjust.
3  In the **Colors** list, click a color setting

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel** and then double-click the appropriate icon
- A **High Color** setting will display over 65,000 colors  A **True Color** setting will allow over 16 million colors
- Settings that display a large number of colors require a significant amount of your computer's processor resources
- Your monitor and display adapter determine the maximum number of colors that can appear on your screen.
- If you are using multiple monitors and you click the icon for a secondary monitor, the **Extend my Windows desktop onto this monitor** check box must be selected to change the settings for that monitor  You can specify the color settings for each installed monitor

## To change your screen resolution when using multiple monitors

1  Open      Display in Control Panel
2  On the **Settings** tab, click the monitor icon that represents the monitor whose screen resolution you want to change
3  In **Screen area**, drag the slider to set the resolution you want to use for the selected monitor, and then click **OK** or **Apply** to view changes

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- If you click a secondary monitor and the **Extend my Windows desktop onto this monitor** check box is not selected, you can't change the settings of that monitor
- A higher screen resolution reduces the size of items on your screen and increases the size of your desktop
- Each monitor has its own screen resolution settings
- Your type of monitor and video adapter determine whether you can change your screen resolution

## To use larger or smaller display fonts

1.  Open      Display in Control Panel
2  On the **Settings** tab, click **Advanced**
3  On the **General** tab, in the **Font Size** list, click the font setting you want used for system fonts
4  If you choose **Other** in the **Font Size** list, you can set custom options in **Custom Font Size** by either selecting one of the percentage options in the drop-down list or clicking on the ruler and dragging the pointer to specify a font size

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- You will be prompted to install the new fonts and restart your computer to apply any changes
- The font size you specify on the **General** tab affects all video adapters on your system You can still change font settings for individual window items on the **Appearance** tab, but your choices will reflect the size of the display font you specified

To set or change the background of your desktop

1  Open ☐ **Display** in Control Panel.
2  On the **Background** tab, do one or more of the following
   - o  Select a background picture from the wallpaper list In the **Picture Display** list, click **Center, Tile,** or **Stretch**
   - o  Click **Pattern** to open the **Pattern** dialog box Under **Pattern,** click the desired pattern

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel,** and then double-click the appropriate icon
- Background pictures may have the following file extensions  bmp, gif, jpg, dib, htm
- You can set an htm document as your wallpaper by saving the document to your hard drive On the **Background** tab, click **Browse** to find your saved document and set it as your wallpaper.
- If you choose an htm document as your background picture, the **Center, Tile,** and **Stretch** options are unavailable
- The **Pattern** button is dimmed if your background picture is tiled or stretched.
- You can also customize a pattern design

To set or change a screen saver

1  Open      **Display** in Control Panel
2  On the **Screen Saver** tab, under **Screen Saver**, click a screen saver in the list

Notes

- To open a Control Panel item, click **Start**, point to **Settings**, click **Control Panel,** and then double-click the appropriate icon
- After you select a screen saver, it will automatically start when your computer is idle for the number of minutes specified in **Wait**
- To clear the screen saver after it has started, move your mouse or press any key Or, if you have assigned a screen saver password, type your logon password.
- To view possible setting options for a particular screen saver, click **Settings** on the **Screen Saver** tab
- Click **Preview** to see how the selected screen saver will appear on your monitor Move your mouse or press any key to end the preview

To adjust the volume for multimedia playback devices

1  Open      **Sounds and Multimedia** in Control Panel
2  On the **Audio** tab, under **Sound Playback**, click **Volume**
3  In the **Volume Control** dialog box, under **Volume Control**, drag the **Volume** slider up or down to increase or decrease the output volume

13

Notes

- To open a Control Panel item, click Start, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- You can limit programs to a specific sound card on the **Audio** tab by selecting that sound card in **Preferred device**, and then selecting **Use only preferred devices**
- If the **Show volume control on the taskbar** check box is selected on the **Sounds** tab and your sound card volume can be changed using software, a speaker icon appears on the taskbar You can then change the volume by clicking that icon and adjusting the slider

## To change your computer's time and time zone

1 Open      Date/Time in Control Panel
2 On the **Date & Time** tab, select the item you want to change
   - o To change the hour, select the hour, and then click the arrows to increase or decrease the value
   - o To change the minutes, select the minutes, and then click the arrows to increase or decrease the value
   - o To change the seconds, select the seconds, and then click the arrows to increase or decrease the value
   - o To change the am/pm indicator, select it, and then click the arrows
3 On the **Time Zone** tab, in the box above the map, click your current time zone

Notes

- To open a Control Panel item, click Start, point to **Settings**, click **Control Panel**, and then double-click the appropriate icon
- Windows uses the time setting to identify when files are created or modified
- If you want your computer's clock to be adjusted automatically when daylight saving time changes, make sure the **Automatically adjust clock for daylight saving changes** check box is selected

## To print a document

1 Open the document you want to print
2 On the **File** menu of the program you are using, click **Print**

Notes

- In the **Print** dialog box you can see the number of documents waiting to print on any printer installed on your computer by right-clicking the printer in **Select Printer** and then clicking **Open.**
- If you are logged on to a Windows 2000 domain running Active Directory, you can click **Find Printer** to search for a printer on the network with the capabilities you want, such as high-speed or color printing To store a document as a file rather than sending it to the printer, click the **Print to file** check box in the **Print** dialog box
- For easy access to your printer, you can create a shortcut to it on the desktop You can double-click the shortcut to open the print queue and view the documents waiting to print
- You can print a document without opening it by dragging its icon to a printer in the Printers folder or to a shortcut on your desktop
- While a document is printing, a printer icon appears next to the clock in the status area on the taskbar When this icon disappears, it means that your document has finished printing

## To set page orientation

1 Open      Printers.
2 Right-click the printer you are using, and then click **Printing Preferences**
3 On the **Layout** tab, under **Orientation**, click one of the following options

14

- o **Portrait** to print vertically on the page
- o **Landscape** to print horizontally on the page
- o **Rotated Landscape** to rotate the print 90 degrees counterclockwise on the page

A representation of your selection will appear in the display area of the dialog box

Notes

- To change printing preferences, you must have the Print permission
- To open Printers, click **Start**, point to **Settings**, and then click **Printers**
- The **Orientation** options appear in the dialog box only if your printer supports this feature The specific options available depend on the printer you are using
- Any changes you make in **Printing Preferences** will alter the default document settings for the printer and will affect all documents you send to the printer To change print settings for individual documents from within a program, click **Page Setup** (or **Print Setup**) on the program's **File** menu, and then make selections

To specify paper size

1    Open        Printers
2    Right-click the printer you are using, and then click **Printing Preferences**
3    Click **Advanced**, and under **Paper/Output** click **Paper Size**
4    Click the paper size (form) you want

To cancel printing of a document

1.   Open        Printers
2    Double-click the printer you are using, which opens the print queue
3    Right-click the document you want to stop printing, and then click **Cancel**

Notes

- By default, all users can pause, resume, restart, and cancel printing of their own documents However, to manage documents printed by other users, you must have the Manage Documents permission
- To open Printers, click **Start**, point to **Settings**, and then click **Printers**
- You can cancel the printing of more than one document by holding down the CTRL key and then clicking each document you want to cancel
- You can also right-click the printer icon in the status area on the taskbar to open the print queue

To start Windows 2000 in safe mode

1    Click **Options**, and then click **Print** to print these instructions They will not be available after you shut your computer down in step 2
2    Click **Start**, and then click **Shut Down**
3    Click **Restart**, and then click **OK**.
4    When you see the message **Please select the operating system to start**, press F8
5    Use the arrow keys to highlight the appropriate safe mode option, and then press ENTER

NUM LOCK must be off before the arrow keys on the numeric keypad will function

6    Use the arrow keys to highlight an operating system, and then press ENTER

Notes

- In safe mode, Windows 2000 uses only basic files and drivers (mouse, monitor, keyboard, mass storage, base video, default system services, and no network

15

connections) You can choose the **Safe Mode with Networking** option, which loads all of the above files and drivers plus the essential services and drivers to start networking, or the **Safe Mode with Command Prompt** option, which is exactly the same as safe mode except that a command prompt is started instead of Windows 2000 You can also choose **Last Known Good Configuration.** which starts your computer using the registry information that Windows 2000 saved at the last shutdown

- Safe mode helps you diagnose problems If a symptom does not reappear when you start in safe mode, you can eliminate the default settings and minimum device drivers as possible causes If a newly added device or a changed driver is causing problems, you can use safe mode to remove the device or reverse the change
- There are circumstances where safe mode will not be able to help you, such as when Windows system files required to start the system are corrupted or damaged In this case, the Emergency Repair Disk (ERD) may help you

## Using Disk Defragmenter

Disk Defragmenter rearranges files, programs, and unused space on your computer's hard disk, so that programs run faster and files open more quickly Disk Defragmenter does not affect anything that you see on the screen, such as files in My Documents or shortcuts on the **Programs** menu

Open        Disk Defragmenter

   Notes

- To open a system tools item, click **Start**, point to **Programs**, point to **Accessories.** point to **System Tools**, and then click the appropriate icon.

## To connect to the network

1. Open        Network and Dial-up Connections
2. Double-click the connection you want to connect to the network
3  If you are prompted, in the **Connect** *connection type* dialog box, type your user name, password, and logon domain

   If **Logon domain** does not appear in this dialog box, and you want to log on to a Windows 2000 domain, type your user name and the Windows 2000 domain name in one of two ways·

      o  Your user principal name prefix (your user name) and your user principal name suffix (your Windows 2000 domain name), joined by the at sign (@) For example, user@sales westcoast.microsoft com
      o  Your Windows 2000 domain name and your user name, separated by the backslash (\) character For example, sales\user

         Note that the suffix in the first example is a fully-qualified DNS domain name Your administrator might have created an alternative suffix to simplify the logon process. For example, creating a user principal name suffix of "microsoft" allows the same user to log on by using the much simpler user@microsoft com

   Once you are connected to the network, you can minimize your connection window and use e-mail, Windows Explorer, and so on

   Notes

- To open Network and Dial-up Connections, click **Start**, point to **Settings**, and then click **Network and Dial-up Connections**

- If you are connecting to your local area network, the local area connection connects automatically
- Windows 2000 authentication is implemented in two steps an interactive logon process and a network authentication process Typically, the same set of credentials is used by the interactive logon process and the network authentication process If your credentials differ, you are prompted to provide Windows domain credentials each time you access a network resource You can avoid this by logging on to your computer using your Windows domain name, your Windows domain user name, and Windows domain password before you try to connect to a network resource. If you log on without being connected to the network, Windows 2000 recognizes the information from a previous successful logon You receive the message "Windows cannot connect to a server to confirm your logon settings You have been logged on using previously stored account information " When you connect to your network, the cached credentials are passed to your Windows 2000 domain and you are able to access network resources without having to provide a password again. The logon domain name you type should be the Windows 2000 domain that the Windows 2000 server is in This is not the DNS domain name given by some PPP/SLIP providers
- If you are using IP connectivity on your local network connection and on your remote connection, you may not be able to see all computers on your local network This is because after you connect, your remote connection becomes your default path for network routing Consequently, you see computers on the remote network, and you see other computers on the same LAN segment to which your computer is connected But you cannot communicate with computers on networks that were previously reached through a router on your local LAN
- In order to run applications over any configured connection, you may need to modify proxy client settings For example, if you use a laptop in your office and use the same computer to connect to an ISP or other network from your home, you may have problems running all of your applications when you use the ISP connection If this is the case, you should disable the Microsoft WinSock Proxy Client (WSP Client in Control Panel) to run the applications that you typically run when you use your laptop in the corporate office

To disconnect from the network

1 Open     Network and Dial-up Connections
2. Right-click the connection you want to disconnect, and then click **Disconnect**.

Notes

- To open Network and Dial-up Connections, click **Start**, point to **Settings**, and then click **Network and Dial-up Connections**
- If you disconnect a local area connection, it disables the network adapter driver until the connection is reactivated

# Word Processor: – Microsoft -Word

Microsoft Word is Word Processor software Word processor, in computer science, an application program for manipulating text-based documents; the electronic equivalent of paper, pen, typewriter, eraser, and most likely, dictionary and thesaurus. Word processors run the gamut from simple through complex, but all ease the tasks associated with editing documents (deleting, inserting, rewording, and so on) Depending on the program and the equipment in use, word processors can display documents either in text mode, using highlighting, underlining, or color to represent italics, boldfacing, and other such formatting, or in graphics mode, wherein formatting and, sometimes, a variety of fonts appear on the screen as they will on the printed page All word processors offer at least limited facilities for document formatting, such as font changes, page layout, paragraph indention, and the like Some word processors can also check spelling, find synonyms, incorporate graphics created with another program, correctly align mathematical formulas, create and print form letters, perform calculations, display documents in multiple on-screen windows, and enable users to record macros that simplify difficult or repetitive operations

The term word processor has also been used to refer to computers introduced in the 1980s that were designed solely for word processing Word processing computers were able to perform multiple editorial functions, such as editing text, inserting new text, deleting text, and performing search and replace functions within the text

## MS-Word Screen
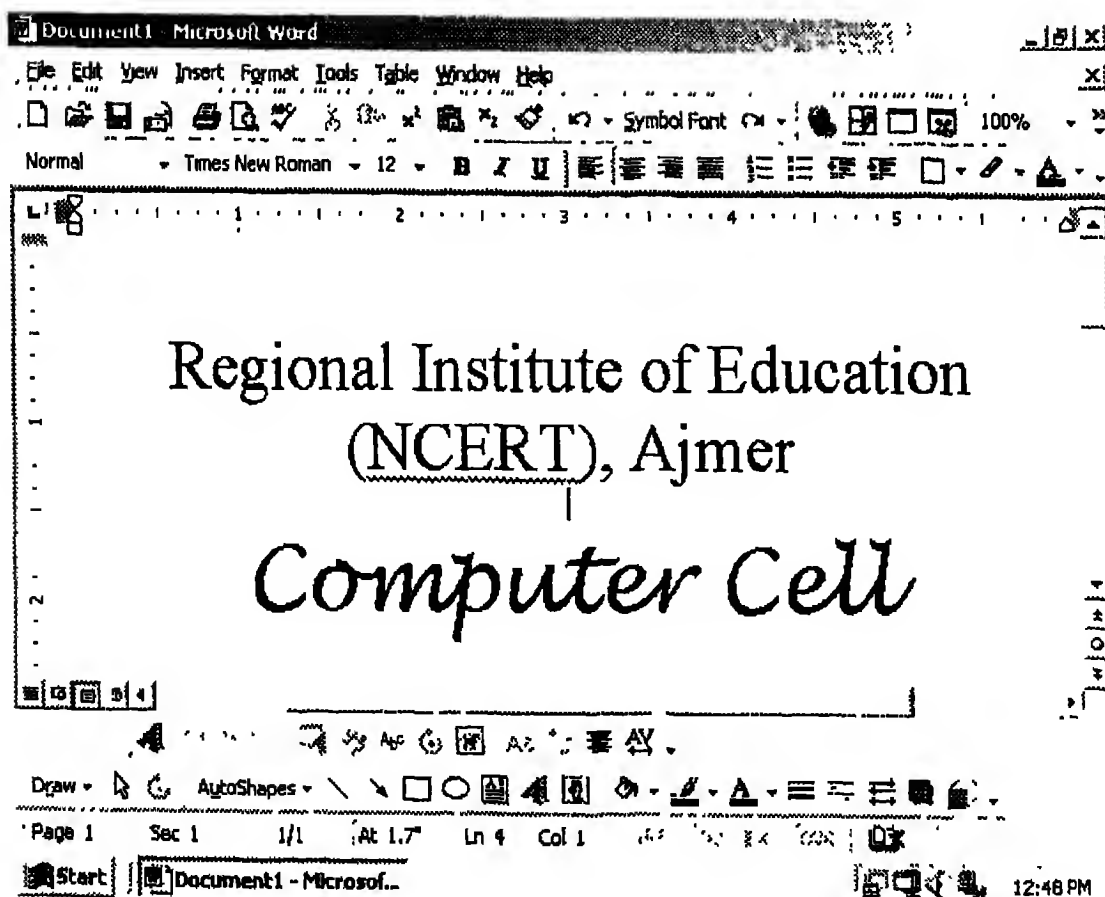
## Title bar

The horizontal bar at the top of a window that contains the name of the window  On many windows, the title bar also contains the program icon, the Maximize, Minimize, and Close buttons, and the optional ? button for context-sensitive Help  To display a menu with commands such as Restore and Move, right-click the title bar.

## Menu bar

Menu Bar, in computer science, a rectangular bar displayed in an application program's on-screen window, often at the top, from which menus can be selected by the user  The names of available menus are displayed in the menu bar, choosing one with the keyboard or with a mouse causes the list of options in that menu to be displayed

## Tools bar

Standard toolbar is a row of icons on a computer screen that are clicked on to perform certain frequently used functions

Formatting bar

Formatting toolbar is a row of icons on a computer screen that are clicked on to perform certain frequently used functions the way in which something is presented, organized, or arranged

## Scroll Bar

Scroll bar is a horizontal or vertical bar on a computer display screen containing a box used to make text or graphics move up, down, or across the screen

## Status bar

Status bar is the bottom of windows screen which shows  the relative position of documents works

## Create a new blank document

1   On the **File** menu, click **New**

2.  Click the **General** tab, and then double-click the **Blank Document** icon.

**Tip**  To create a new document  quickly, click **New Blank Document icon** on the **Standard toolbar**

### Types of Word documents

There are several types of Word documents you can start from

- **Blank document** .  Start with a blank document when you want to create a traditional printed document

- **Web page**   Use a Web document when you want to display the document's contents on an intranet or the Internet in a Web browser  A Web page opens in Web layout view  Web pages are saved in HTML format

- **E-mail messages**.  If you use Outlook 2000 or Outlook Express, use an e-mail message when you want to compose and send a message or a document to others directly from Word  An e-mail message includes an e-mail envelope toolbar so that you can fill in the recipient names and subject of the message, set message properties, and then send the message

19

- **Templates:** Use a template when you want to reuse boilerplate text, custom toolbars, macros, shortcut keys, styles, and AutoText entries

**When you save a Word document, its document type determines the file format it is saved.**

## Open a document

1. **On the** File **menu, click** Open

1 If you want to open a document that was saved in a different folder, locate and open the folder

2 Double-click the document you want to open

## Open a document as a copy

1 On the **File** menu, click Open

2. If you want to open a document that was saved in a different folder, locate and open the folder

3 Click the document you want to open a copy of
4 Click the arrow next to the **Open** button, and then click **Open as Copy**

**Note** When you open a document as a copy, a new copy of the document is created in the folder that contains the original document

## Open a document as read-only

1 On the **File** menu, click Open

2 If you want to open a document that was saved in a different folder, locate and open the folder

3 Click the document you want to open as read-only.

If you can't find the document in the folder list, you can search for it

4 Click the arrow next to the **Open** button, and then click **Open Read-Only**

**Tip** To save changes to a read-only file, use the **Save As** command (**File** menu) to save it with a new name

## Save a document

**To quickly save a document, click** Save **icon on the** Standard **toolbar.**

## Save a new, unnamed document

1 Click **Save** icon on the **Standard** toolbar

2 If you want to save the document in a different folder, locate and open the folder

3 In the **File name** box, type a name for the document

You can use long, descriptive file names if you want

4 Click **Save**

## Save an existing document

- Click **Save** on the **Standard** toolbar

## Save a copy of a document

1       Open the document you want to make a copy of

2   On the **File** menu, click **Save As**

     If you want to save the document in a different folder, <u>locate and open the folder</u>

3   In the **File name** box, type a new name for the document

## Copy a file

1   On the **File** menu, click Open

2   If you want to copy a file that was saved in a different folder, <u>locate and open the folder</u>

3   Right-click the file you want to copy, and then click **Copy** on the shortcut menu

     If you can't find the file in the folder list, you can search for it

4   If you want to copy the file to a different folder, <u>locate and open the folder</u>

5   Right-click in the folder list (make sure a file is not selected), and then click **Paste** on the shortcut menu

     The **Paste** command is not available if a file is selected in the folder list

4   Click **Save.**

## Delete a file

1   On the **File** menu, click Open

2   If you want to delete a file that was saved in a different folder, <u>locate and open the folder</u>

3   Right-click the file you want to delete, and then click **Delete** on the shortcut menu

**Note**   You can also select more than one file to delete at a time.

## Move a file

1   Click **Open** ⬜

2   If you want to move a file that was saved in a different folder, <u>locate and open the folder</u>

3   Right-click the file you want to move, and then click **Cut** on the shortcut menu

     If you can't find the file in the folder list, you can search for it

4   If you want to move the file to a different folder, <u>locate and open the folder</u>

5   Right-click in the folder list (make sure a file is not selected), and then click **Paste** on the shortcut menu

     The **Paste** command is not available if a file is selected in the folder list

## Rename a file

1   On the **File** menu, click Open

2   If you want to rename a file that was saved in a different folder, <u>locate and open the folder</u>

3   Right-click the file you want to rename, and then click **Rename** on the shortcut menu

If you can't find the file in the folder list, you can search for it.

4    Type the new name, and then press ENTER

## Show or hide a toolbar

- Right-click any toolbar, and then click the toolbar you want to show or hide on the shortcut menu

    If you don't see the toolbar you want, click **Customize**, click the **Toolbars** tab, and then click the toolbar you want in the **Toolbars** list.

## Insert the current date and time

1    Click where you want to insert the date or time

2    On the **Insert** menu, click **Date and Time**

    If you want to insert the date or time in a different language format, then click the language in the **Language** box.

    The **Language** box includes a list of the enabled editing languages Additional date and time options may also be available, depending on the language that you selected

3    In the **Available formats** box, click a date or time format

4    Do one of the following:
    o   To insert the date and time as a field that's automatically updated when you open or print the document, select the **Update automatically** check box

    o   To maintain the original date and time as static text, clear the **Update automatically** check box

## Insert a manual line break

1    Click where you want to break a line

2    Press SHIFT+ENTER

## Insert a symbol

1    Click where you want to insert the symbol

2    On the **Insert** menu, click **Symbol**, and then click the **Symbols** tab

3    In the **Font box**, click the font that you want

4    If you want to get a close-up view of a symbol, click it

5    Double-click the symbol that you want to insert

## Insert a special character

1    Click where you want to insert the character

2    On the **Insert** menu, click **Symbol**, and then click the **Special Characters** tab

3    Double-click the character you want to insert

## Scroll through a document by using the mouse

After scrolling, click where you want to start typing

|   To   |   Do this   |
|--------|-------------|

| | |
|---|---|
| Scroll up one line | Click the up scroll arrow |
| Scroll down one line | Click the down scroll arrow |
| Scroll up one screen | Click above the scroll box |
| Scroll down one screen | Click below the scroll box |
| Scroll to a specific page | Drag the scroll box |
| Scroll left | Click the left scroll arrow |
| Scroll right | Click the right scroll arrow |
| Scroll left, beyond the margin, in normal view | Hold down SHIFT and click the left scroll arrow |

For a quick way to scroll up or down one page, click **Select Browse Object** on the cal scroll bar, and then click **Browse by Page** Then click **Next Page** or **Previous Page**

## Go to a specific page, table, or other item

1  On the **Edit** menu, click **Go To**

2  In the **Go to what** box, click the type of item

3  Do one of the following.
   1  To go to a specific item, type the name or number of the item in the **Enter** box, and then click **Go To**

   2  To go to the next or previous item of the same type, leave the **Enter** box empty, and then click **Next** or **Previous**

## Select text and graphics by using the mouse

| To select | Do this |
|---|---|
| Any amount of text | Drag over the text |
| A word | Double-click the word. |
| A graphic | Click the graphic |
| A line of text | Move the pointer to the left of the line until it changes to a right-pointing arrow, and then click |
| Multiple lines of text | Move the pointer to the left of the lines until it changes to a right-pointing arrow, and then drag up or down |
| A sentence | Hold down CTRL, and then click anywhere in the sentence |
| A paragraph | Move the pointer to the left of the paragraph until it changes to a right-pointing arrow, and then double-click Or triple-click anywhere in the paragraph |
| Multiple paragraphs | Move the pointer to the left of the paragraphs until it changes to a right-pointing arrow, and then double-click and drag up or down. |
| A large block of text | Click at the start of the selection, scroll to the end of the selection, and then hold down SHIFT and click |
| An entire document | Move the pointer to the left of any document text until it changes to a right-pointing arrow, and then triple-click |

| | |
|---|---|
| Headers and footers | In normal view, click **Header and Footer** on the **View** menu, in print layout view, double-click the dimmed header or footer text Move the pointer to the left of the header or footer until it changes to a right-pointing arrow, and then triple-click |
| Comments, footnotes, and endnotes | Click in the pane, move the pointer to the left of the text until it changes to a right-pointing arrow, and then triple-click |
| A vertical block of text (except within a table cell) | Hold down ALT, and then drag over the text |

## Turn on or off AutoCorrect options

1   On the **Tools** menu, click **AutoCorrect**

2   Do one or more of the following
  o   To set the capitalization options, select or clear the first four check boxes in the dialog box

  o   To turn on or off the AutoCorrect entries, select or clear the **Replace text as you type** check box

  o   To turn on the spelling checker corrections, select the **Replace text as you type** check box, and then select the **Automatically use suggestions from the spelling checker** check box To turn off the spelling checker corrections, clear the **Automatically use suggestions from the spelling checker** check box

### Use AutoCorrect to correct errors as you type

Type the text you want to correct, followed by a space or other punctuation

  For example, type **teh** followed by a space, and watch AutoCorrect replace your text with "the"

## Delete an AutoCorrect entry

1   On the **Tools** menu, click **AutoCorrect.**

2   In the list under the **Replace** box, click the entry you want to remove

3   Click **Delete**

## Find text

1 On the **Edit** menu, click **Find**

1   In the **Find what** box, enter the text that you want to search for

2   Select any other options that you want.
3   Click **Find Next**

## Replace text

1   On the **Edit** menu, click **Replace**

2 In the **Find what** box, enter the text that you want to search for

3 In the **Replace with** box, enter the replacement text

4 Select any other options that you want

4   Click **Find Next, Replace,** or **Replace All**

To cancel a search in progress, press ESC

### Undo mistakes

1   On the **Standard** toolbar, click the arrow next to **Undo**

Word displays a list of the most recent actions you can undo

2   Click the action you want to undo If you don't see the action scroll through the list

When you undo an action, you also undo all actions above it in the list

**Tip**   If you later decide you didn't want to undo an action, click **Redo** on the **Standard** toolbar

### Check spelling and grammar all at once

1   By default, Microsoft Word checks both spelling and grammar If you want to check spelling only, click **Options** on the **Tools** menu, click the **Spelling & Grammar** tab, clear the **Check grammar with spelling** check box, and then click **OK**

2   Click **Spelling and Grammar** on the **Standard** toolbar

3   When Word finds a possible spelling or grammatical error, make your changes in the **Spelling and Grammar** dialog box

**Tips**

•   You can also edit a spelling or grammatical error directly in the document Just type your correction, and then click **Resume** in the **Spelling and Grammar** dialog box

### Change the font of text or numbers

1   Select the text you want to change

2   On the **Formatting** toolbar, click a font name in the **Font** box

### Change the size of text or numbers

1.   Select the text you want to change

2.   On the **Formatting** toolbar, click a point size in the **Font Size** box

### Add a basic underline

1.   Select the text you want to change

2   On the **Formatting** toolbar, click **Underline**

### Add a decorative underline

1   Select the text you want to change

2   On the **Format** menu, click **Font**, and then click the **Font** tab

3   In the **Underline style** list, click the style you want

4   In the **Underline color** list, click the color you want

### Apply bold formatting to text or numbers

1   Select the text you want to change

2   On the **Formatting** toolbar, click **Bold** ☐.

## Apply italic formatting to text or numbers

1   Select the text you want to change

2   On the **Formatting** toolbar, click **Italic** ☐

## Change the color of text and numbers

1   Select the text you want to change

2   Do one of the following

To apply the color most recently used for text, click **Font Color** ☐ on the **Formatting** toolbar

To apply a different color, click the arrow next to the **Font Color** button, and then select the color you want

## Vary the case of text

1      Select the text you want to change

2   On the **Format** menu, click **Change Case**
3   Click the capitalization option you want

## Format text as all capital letters

1   Select the text you want to format as all capital letters

2   On the **Format** menu, click **Font**, and then click the **Font** tab.

3   Select the **All caps** check box

## Select Format text as small capital letters

1   Select the text you want to format as small capital letters

2   On the **Format** menu, click **Font**, and then click the **Font** tab

3   Select the **Small caps** check box

## Create a large dropped initial capital letter

1      Click the paragraph that you want to begin with a "drop cap," a large dropped initial capital letter

The paragraph must contain text

2   On the **Format** menu, click **Drop Cap**

Click **Dropped** or **In Margin**

3   Select any other options you want

## Remove a large dropped initial capital letter

1.     Click the paragraph that contains a "drop cap," a large dropped initial capital letter

2   On the **Format** menu, click **Drop Cap**
3   Click **None**

## Align text with the left margin

1 Select the text you want to align left

2 On the **Formatting** toolbar, click **Align Left**

## Center text

1 Select the text you want to center

2 On the **Formatting** toolbar, click **Center**

## Align text with the right margin

1 Select the text you want to align with the right margin

2 On the **Formatting** toolbar, click **Align Right**

## Justify text

1. Select the text you want to justify

2 On the **Formatting** toolbar, click **Justify**

## Move or copy an item a long distance or to another document

1 Select the item you want to move or copy

2 Do one of the following
   o To move the item, click **Cut** icon on the **Standard** toolbar

   o To copy the item, click **Copy** icon on the **Standard** toolbar
3 If you want to move or copy the item to another document, switch to the document

4 Click where you want the item to appear

5 Click **Paste** on the **Standard** toolbar

## Add bullets or numbering

1 Select the items you want to add bullets or numbering to

2 On the **Formatting** toolbar, do one of the following

   To add bullets, click **Bullets**

   To add numbering, click **Numbering**

## Remove bullets or numbering from lists

1 Select the items from which you want bullets or numbering removed

2 On the **Formatting** toolbar, do one of the following

   To remove bullets, click **Bullets**

   To remove numbering, click **Numbering**

Word automatically adjusts the number sequence of a numbered list

## Create newspaper columns to continue a story in the next column on the same page

1 Switch to print layout view

2 To format the entire document in columns, click **Select All** on the **Edit** menu

27

To format part of the document in columns, select the text

To format existing sections in columns, click in a section or select multiple sections

3 On the **Standard** toolbar, click **Columns** ⌐⌐

4 Drag to select the number of columns you want

5 If you want to adjust the column widths and spacing, drag the column markers on the horizontal ruler

- To set exact column widths and spacing, follow steps 1 and 2 Then click **Columns** on the **Format** menu, and select the options you want

- Word offers you several ways to lay out text or a story in newsletters, brochures, and flyers Learn about laying out text in a newsletter-style document

**Change the number of newspaper columns**

1 Switch to print layout view

2 To change the number of columns for the entire document, click **Select All** on the **Edit** menu

To change the number of columns for part of the document, select the text

To change the number of columns for existing sections, click in the section or select multiple sections

. 3 Click **Columns** icon, and then drag to select the number of columns you want

**Add or change a background color or texture**

Word displays backgrounds that you add with the **Background** command on the **Format** menu in Web layout view only These backgrounds aren't designed for printed documents

1 On the **Format** menu, point to **Background**, and then click the color you want, or click **More Colors** to see additional color choices Click **Fill Effects** for special effects, such as textures

2 Select the options that you want

**Change the page margins**

1 Switch to print layout view

2 Point to a margin boundary on the horizontal ruler or vertical ruler When the pointer changes to a double-headed arrow, drag the margin boundary

**Select the page orientation**

1 On the **File** menu, click **Page Setup**, and then click the **Paper Size** tab

2 Under **Orientation**, click **Portrait** or **Landscape and click ok**

**Select the paper size**

1 On the **File** menu, click **Page Setup**, and then click the **Paper Size** tab

2 Click a paper size Select paper size And Click ok

**Insert a manual page break**

.

1 Click where you want to start a new page

2 On the **Insert** menu, click on Page Break Option and Click Ok

## Insert page numbers

1 On the **Insert** menu, click **Page Numbers.**

1 In the **Position** box, specify whether to print page numbers in the header at the top of the page or in the footer at the bottom of the page

2 Select any other options you want

3 Click **OK**

## Insert a picture from the Clip Gallery

1. Click the area where you want to insert a picture or clip art

2 Click **Insert Clip Art** on the **Drawing** toolbar, and then click the **Pictures** tab

3 Click the category you want

4 Click the picture you want, and then click **Insert clip** on the menu that appears

5 When you are finished using the Clip Gallery, click the **Close** button    on the Clip Gallery title bar

## Insert a WordArt drawing object

1. On the **Drawing** toolbar, click **Insert WordArt** .

2 Click the type of WordArt drawing object you want, and then click **OK**

3 In the **Edit WordArt Text** dialog box, type the text you want to format, select any other options you want, and then click **OK**

4. To add or change effects to the text, use the buttons on the **WordArt** and **Drawing** toolbars  The **WordArt** toolbar appears when you click the WordArt special text

## Delete a drawing object

1 Select the object you want to delete.

2 Press DELETE, or click **Cut**

## Add a border to text

1. Do one of the following·

   To add a border to a paragraph, click anywhere in the paragraph

   To add a border only to specific text, select the text

2 On the **Format** menu, click **Borders and Shading,** and then click the **Borders** tab

3 Select the options you want, and make sure the correct option — **Paragraph** or **Text** — is selected under **Apply to**

   For Help on an option, click the question mark    and then click the option

4. To specify that only particular sides get borders, click **Custom** under **Setting** Under **Preview,** click the diagram's sides, or use the buttons to apply and remove borders

5 To specify the exact position of the border relative to the text, click **Paragraph** under **Apply to,** click **Options,** and then select the options you want.

**Remove a border from text**

   1   Do one of the following

       To remove a paragraph border. click anywhere in the paragraph

       To remove a border around specific text, such as a word, select the text

   2   On the **Format** menu. click **Borders and Shading**, and then click the **Borders** tab

   3   Under **Setting**. click **None**

**Add a border to a page in a document**

   1

       On the **Format** menu, click **Borders and Shading**, and then click the **Page Border** tab

       ☐ Select the options you want

       For Help on an option. click the question mark     and then click the option

   2   To specify that the border appears on a particular side of a page, such as only at the top, click **Custom** under **Setting** Under **Preview**, click where you want the border to appear

   3   To specify a particular page or <u>section</u> for the border to appear in, click the option you want under **Apply to**

   4   To specify the exact position of the border on the page, click **Options**, and then select the options you want

**Remove a border from a page in a document**

   1   On the **Format** menu, click **Borders and Shading**, and then click the **Page Border** tab

   2   Under **Setting**. click **None**

**Note** To remove the border from only one edge of the document — for example, to remove all but the top border — click the borders you want to remove in the diagram under **Preview**

**Quickly create a simple table**

   1   Click where you want to create a table

   2   Click **Insert Table** on the <u>Standard toolbar</u>

   3   Drag to select the number of rows and columns you want

**Note** You can use the **Table AutoFormat** command to quickly give a table a polished look by using a variety of borders. fonts. and shading

**Move or copy items in a table**

   1   <u>Select the cells, rows, or columns</u> you want to move or copy

To move or copy text to a new location without changing the text that is already there, select only the text within a cell, and not the end-of-cell mark.

To replace the existing text and formatting in the new location, select the text you want to move or copy and select the end-of-cell mark

2   Do one of the following

To move the selection, drag it to the new location

To copy the selection, hold down CTRL while you drag the selection to the new location

## Delete a table and its contents

1.   Click the table

2   On the **Table** menu, point to **Delete**, and then click **Table**

## Delete cells, rows, or columns from a table

1   Select the cells, rows, or columns you want to delete

2   On the **Table** menu, point to **Delete**, and then click either **Columns, Rows**, or **Cells**

3   If you are deleting cells, click the option you want

For Help on an option, click the question mark      and then click the

## Clear the contents of a table

1   Select the items you want to clear.

2.   Press DELETE

## Add rows or columns to a table

1   Select the same number of rows or columns as the number of rows or col⌐─┐ you want to insert.

2.   On the **Tables and Borders** toolbar, click the arrow next to **Insert Table** └──┘, and then click the **Insert** command you want

**Notes**

- You can also use the **Draw Table** tool to draw the row or column where you want

- To quickly add a row at the end of a table, click the last cell of the last row, and then press the TAB key

- To add a column to the right of the last column in a table, click just outside the rightmost column  On the **Table** menu, point to **Insert**, and then click **Columns to the Right**

## Merge cells into one cell in a table

You can combine two or more cells in the same row or column into a single cell  For example, you can merge several cells horizontally to create a table heading that spans several columns

1   On the **Tables and Borders** toolbar, click **Eraser**

2   Drag the eraser over the cell dividers you want to remove

**Notes**

31

- You can quickly merge multiple cells by selecting them and clicking **Merge Cells**

- When you merge several cells in a column to create a ve[    ]lly oriented table heading that spans several rows, click **Change Text Direction** [  ]to change the orientation of the heading text If you change the direction of text and save the document as a Web page, the text will not appear changed when the page is viewed in the browser

## Split a cell into multiple cells in a table

1. On the **Tables and Borders** toolbar, click **Draw Table**

   The pointer changes to a pencil

2. Drag the pencil to create new cell partitions.

**Tip** To split multiple cells, select them, and then click **Split Cells**

## Preview a document before printing

- To display each page as it will look when printed, click **Print Preview**      on the **Standard** toolbar

   To exit print preview and return to the previous view of the document, click **Close**

**Note** You can also edit text in print preview

## Print a range of pages

1.

   On the **File** menu, click **Print**

   Under **Page range**, specify the portion of the document you want to print

   If you click **Pages**, you must also enter the page numbers or page ranges you want to include, or both

**Notes**

- You can print specific pages, one or more sections, or a range of pages in more than one section

- You can also select the portion of the document you want to print Click **Print** on the **File** menu, and then click **Selection**

## Print more than one copy at a time

   On the **File** menu, click **Print**

   In the **Number of copies** box, enter the number of copies you want to print

**Note** To print a complete copy of the document before the first page of the next copy is printed, select the **Collate** check box If you prefer to print all copies of the first page and then print all copies of subsequent pages, clear the check box

## Cancel printing

- If background printing is turned off, click **Cancel** or press ESC.

- If background printing is turned on, double-click the printer icon      on the status bar

**Note** If you're printing a short document and background printing is turned on, the printer icon may not appear on the status bar long enough for you to click it to cancel printing

# Spreadsheet Program – Microsoft- Excel

Microsoft Excel is a Spreadsheet Program Spreadsheet program, in computer science, an application program commonly used for budgets, forecasting, and other finance-related tasks. In a spreadsheet program, data and formulas to calculate those data are entered into ledgerlike forms (spreadsheets or worksheets) for analysis, tracking, planning, or "what-if" evaluations of the impacts of real or proposed changes on an economic strategy. Spreadsheet programs use rows and columns of cells, each cell can hold text or numeric data or a formula that uses values in other cells to calculate a desired result To ease computation, these programs include built-in functions that perform standard calculations Depending on the program, a single spreadsheet can contain anywhere from thousands to millions of cells. Some spreadsheet programs can also link one spreadsheet to another that contains related information, and can update data in linked spreadsheets automatically Spreadsheet programs may also include macro facilities, and some can be used for creating and sorting databases For printed output, spreadsheet programs usually provide graphing capabilities and a variety of formatting options for printed pages and text, numeric values, and captions and legends in graphs

## MS- Excel Screen



| Months | No of days |
|--------|-----------|
| January | 31 |
| February | 29 |
| March | 31 |
| April | 30 |
| May | 31 |
| June | 30 |
| July | 31 |
| August | 31 |
| September | 30 |
| October | 31 |
| November | 30 |
| December | 31 |

Year 2004
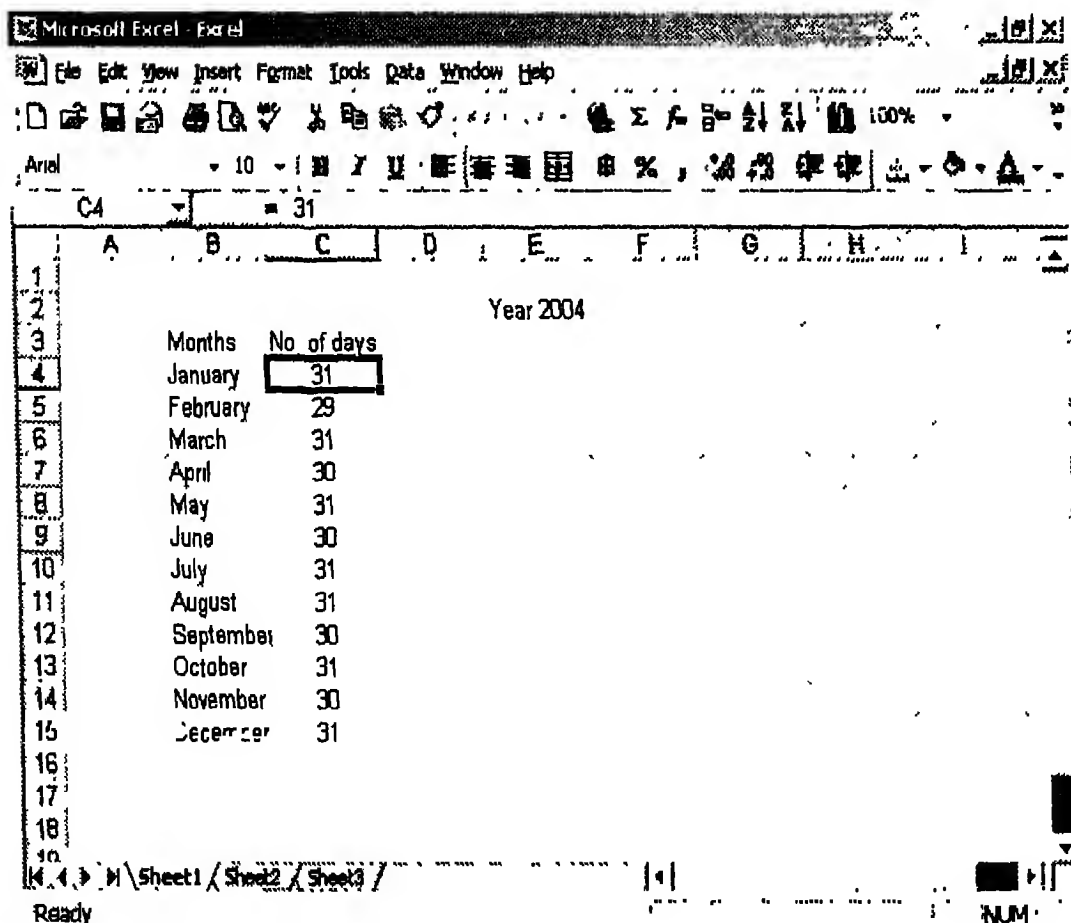
## Worksheet and workbook specifications

| | |
|---|---|
| Worksheet size | 65,536 rows by 256 columns |
| Column width | 255 characters |
| Sheets in a workbook | Limited by available memory (default is 3 sheets) |

## Create a new workbook

1 On the **File** menu, click **New**

2 To create a new, blank workbook, click the **General** tab, and then double-click the Workbook icon

To create a workbook based on a template, click the **Spreadsheet Solutions** tab or the tab listing your custom templates, and then double-click the template for the type of workbook you want to create

## Change the font or font size

1 Select whole cells or the specific text in a single cell that you want to format
2 In the **Font** box     on the **Formatting** toolbar, click the font you want

In the **Font Size** box   , click the font size you want

## Shrink the font size to show all data in a cell

If a small amount of data isn't visible in a cell, you can reduce the font size of the data so that you don't have to resize the column

To show multiple lines of text in a cell, use the **Wrap text** check box on the **Alignment** tab

1 Select the cells you want to format

2 On the **Format** menu, click **Cells**, and then click the **Alignment** tab

3 Select the **Shrink to fit** check box

## Change the default font and font size used in new workbooks

1 On the **Tools** menu, click **Options**, and then click the **General** tab

2 In the **Standard font** box, click a font

3 In the **Size** box, enter a font size

## Change the text color

1 Select whole cells or the specific text in a single cell that you want to format
2 To apply the most recently selected color, click **Font Color**    on the **Formatting** toolbar

To apply a different color, click the arrow next to **Font Color**  , and then click a color on the palette

## Make selected text or numbers bold, italic, or underlined

1 Select whole cells or the specific text in a single cell that you want to format
2 On the **Formatting** toolbar, click a button for the format you want

| To make text | Click |
|---|---|
| Bold | **B** |

Italic          *I*

Underlined      <u>U</u>


## Center data or align data to the left or right

In cells that have the default General format, text is left-aligned, and numbers, dates, and times are right-aligned Changing the alignment does not change the type of data

1   Select the cells you want to format

2   On the **Formatting** toolbar, click the appropriate button

| To align text | Click |
|---|---|
| To the left | **Align Left** icon |
| Centered | **Center** icon |
| To the right | **Align Right** icon |

# Change column width

- Drag the boundary on the right side of the column heading until the column is the width you want

- **Change multiple columns**  To change the column width for multiple columns, select the columns you want to change, and then drag a boundary to the right of a selected column heading  To change the column width for all columns on the worksheet, click the **Select All** button, and then drag the boundary of any column heading.

- **Manually change the width**  To manually change the width, select the column, point to **Column** on the **Format** menu, click **Width**, and then enter a number

# Change row height

- Drag the boundary below the row heading until the row is the height you want


**Tips**

- **Fit the contents**  To make the row height fit the contents, double-click the boundary below the row heading

- **Change multiple rows**  To change the row height for multiple rows, select the rows you want to change, and drag a boundary below a selected row heading  To change the row height for all rows on the worksheet, click the **Select All** button, and then drag the boundary below any row heading

## Merge cells to span several columns or rows

Microsoft Excel places only the upper-leftmost data in the selected range into the resulting merged cell  To include all data in the range in the merged cell, copy the data into the upper-leftmost cell within the range  For information about how to copy the data, click

1   Select the cells you want to merge

2   To merge cells in a row and center the cell contents, click **Merge and Center**       on the **Formatting** toolbar

To merge any selection of cells within a row or column, click **Cells** on the **Format** menu, click the **Alignment** tab, and then select the **Merge cells** check box

## Split a merged cell into separate cells

1   Click the merged cell

2   On the **Format** menu, click **Cells**, and then click the **Alignment** tab
3   Clear the **Merge cells** check box

## Apply borders to cells

1   Select the cells you want to add borders to

2   To apply the most recently selected border style, click **Borders**      on the **Formatting** toolbar

    To apply a different border style, click the arrow next to **Borders**     , and then click a border on the palette

## Remove borders

1   Select the cells you want to remove borders from

2   On the **Formatting** toolbar, click the arrow next to **Borders**     , and then click    on the palette

**Viewing how your worksheet will print**   Microsoft Excel provides three ways to see and adjust how the worksheet will look

- **Normal view**   The default It's best for on-screen viewing and working

- **Print preview**   Shows you the printed page and lets you easily adjust columns and margins

- **Page break preview**   Shows you what data will go on each page and lets you quickly adjust the print area and page breaks.

As you make settings that affect how your worksheet will print, you can switch between the different views to see the effects before you send the data to the printer

You can set the orientation of the printed worksheet to portrait or landscape

**When to use landscape**   Switch to landscape when you need to print many more columns of data than will fit on a portrait page If you don't want to use landscape, you can change the layout of the printed worksheet to fit the data to the available space, or adjust the margins

**Making the data fit the page**   You can make the printed image fit the page or paper size by shrinking or expanding the printed image Other changes you can make to the layout of the printed worksheet include setting the paper size, centering the data on the printed page, and controlling how the pages are numbered. These changes affect only the worksheet's printed appearance, not how it looks on the screen

**Print partial data**   To print only selected parts of the data on a worksheet, you can specify which areas to print

## Change the page orientation

1   Click the worksheet

2   On the **File** menu, click **Page Setup**, and then click the **Page** tab

3   Under **Orientation**, click **Portrait** or **Landscape**

## Center worksheet data on the printed page

1   Click the worksheet

2   On the File menu, click **Page Setup**, and then click the **Margins** tab.

3   To center worksheet data horizontally on the page between the left and right margins, select the **Horizontally** check box under **Center on page**.

    To center worksheet data vertically on the page between the top and bottom margins, select the **Vertically** check box under **Center on page**

## Set the size of the paper

1   Click the worksheet

2.  On the File menu, click **Page Setup**, and then click the **Page** tab

3   In the **Paper size** box, click the size of paper you want

## Set page margins

1   To set page margins for one sheet, click the worksheet

    To set page margins for more than one sheet, select the sheets

2   On the File menu, click **Page Setup**, and then click the **Margins** tab.

3   In the **Top, Bottom, Left,** and **Right** boxes, enter the margin size you want

•   To see how the page margins will affect the printed document, click **Print Preview** before the document is printed  To adjust the margins in print preview, click **Margins**, and then drag the handles

## Print a worksheet on a specified number of pages

1   Click the worksheet.

2   On the File menu, click **Page Setup**, and then click the **Page** tab

3   Click **Fit to**

4   Enter the number of pages on which you want to print the work

    Printed data does not exceed the specified number of pages. Microsoft Excel does not enlarge the data to fill the pages

## Enter a formula

For information about how formulas calculate values, click

1   Click the cell in which you want to enter the formula.

2.  Type = (an equal sign)

    If you click **Edit Formula**       or **Paste Function**       , Microsoft Excel inserts an equal sign for you

3   Enter the formula

4   Press ENTER

### About using the Formula Palette to enter and edit formulas

**Entering formulas**  When you create a formula that contains a function, the Formula Palette helps you enter worksheet functions  As you enter a function into the formula, the Formula Palette displays the name of the function, each of its arguments, a description of the function

and each argument, the current result of the function, and the current result of the entire formula. To display the Formula Palette, click **Edit Formula** in the formula bar.

**Editing formulas** You can use the Formula Palette to edit functions in formulas. Select a cell that contains a formula, and then click **Edit Formula** to display the Formula Palette. The first function in the formula and each of its arguments appear in the palette. You can edit the first function or edit another function in the same formula by clicking in the formula bar anywhere within the function.

## Calculation operators in formulas

Operators specify the type of calculation that you want to perform on the elements of a formula. Microsoft Excel includes four different types of calculation operators arithmetic, comparison, text, and reference.

**Arithmetic operators** To perform basic mathematical operations such as addition, subtraction, or multiplication, combine numbers, and produce numeric results, use the following arithmetic operators

| Arithmetic operator | Meaning | Example |
| --- | --- | --- |
| + (plus sign) | Addition | 3+3 |
| − (minus sign) | Subtraction Negation | 3−1 −1 |
| * (asterisk) | Multiplication | 3*3 |
| / (forward slash) | Division | 3/3 |
| % (percent sign) | Percent | 20% |
| ^ (caret) | Exponentiation | 3^2 (the same as 3*3) |

**Comparison operators** You can compare two values with the following operators. When two values are compared by using these operators, the result is a logical value, either TRUE or FALSE.

| Comparison operator | Meaning | Example |
| --- | --- | --- |
| = (equal sign) | Equal to | A1=B1 |
| > (greater than sign) | Greater than | A1>B1 |
| < (less than sign) | Less than | A1<B1 |
| >= (greater than or equal to sign) | Greater than or equal to | A1>=B1 |
| <= (less than or equal to sign) | Less than or equal to | A1<=B1 |
| <> (not equal to sign) | Not equal to | A1<>B1 |

**Text concatenation operator** Use the ampersand (&) to join, or concatenate, one or more text strings to produce a single piece of text

| Text operator | Meaning | Example |
| --- | --- | --- |
| & (ampersand) | Connects, or concatenates, two values to produce one continuous text value | "North" & "wind" produce "Northwind" |

**Reference operators**  Combine ranges of cells for calculations with the following operators

| Reference operator | Meaning | Example |
|---|---|---|
| (colon) | Range operator, which produces one reference to all the cells between two references, including the two references | B5 B15 |
| , (comma) | Union operator, which combines multiple references into one reference | SUM(B5 B15,D5.D15) |

## The order in which Microsoft Excel performs operations in formulas

If you combine several operators in a single formula, Microsoft Excel performs the operations in the order shown in the following table  If a formula contains operators with the same precedence — for example, if a formula contains both a multiplication and division operator — Excel evaluates the operators from left to right  To change the order of evaluation, enclose the part of the formula to be calculated first in parentheses  For more information about calculation operators, click

| Operator | Description |
|---|---|
| (colon) | Reference operators |
| (single space) | |
| , (comma) | |
| – | Negation (as in –1) |
| % | Percent |
| ^ | Exponentiation |
| * and / | Multiplication and division |
| + and – | Addition and subtraction |
| & | Connects two strings of text (concatenation) |
| = < > <= >= <> | Comparison |

## Edit a formula

   1   Click the cell that contains the formula you want to edit
   2   In the formula bar, make the changes to the formula

       If you want to edit a function in the formula, edit the arguments in the function

   3   Press ENTER

## Move or copy a formula

   1   Select the cell that contains the formula you want to move or copy

   2   Point to the border of the selection

   3   To move the cell, drag the selection to the upper-left cell of the paste area  Microsoft Excel replaces any existing data in the paste area

       To copy the cell, hold down CTRL as you drag

## The difference between relative and absolute references

**Relative references** When you create a formula, references to cells or ranges are usually based on their position relative to the cell that contains the formula. In the following example, cell B6 contains the formula =A5. Microsoft Excel finds the value one cell above and one cell to the left of B6. This is known as a relative reference

When you copy a formula that uses relative references, Excel automatically adjusts the references in the pasted formula to refer to different cells relative to the position of the formula. In the following example, the formula in cell B6, =A5, which is one cell above and to the left of B6, has been copied to cell B7. Excel has adjusted the formula in cell B7 to =A6, which refers to the cell that is one cell above and to the left of cell B7

**Absolute references** If you don't want Excel to adjust references when you copy a formula to a different cell, use an absolute reference. For example, if your formula multiplies cell A5 with cell C1 (=A5*C1) and you copy the formula to another cell, Excel will adjust both references. You can create an absolute reference to cell C1 by placing a dollar sign ($) before the parts of the reference that do not change. To create an absolute reference to cell C1, for example, add dollar signs to the formula as follows

=A5*$C$1

## About statistical functions

Statistical worksheet functions perform statistical analysis on ranges of data. For example, a statistical worksheet function can provide statistical information about a straight line plotted through a group of values, such as the slope of the line and the y-intercept, or about the actual points that make up the straight line

## AVERAGE

Returns the average (arithmetic mean) of the arguments

**Syntax**

**AVERAGE(number1,number2, ...)**

Number1, number2,    are 1 to 30 numeric arguments for which you want the average

**Remarks**

- The arguments must be either numbers or names, arrays, or references that contain numbers

- If an array or reference argument contains text, logical values, or empty cells, those values are ignored. however, cells with the value zero are included

**Examples**

If A1·A5 is named Scores and contains the numbers 10, 7, 9, 27, and 2, then.

AVERAGE(A1:A5) equals 11

AVERAGE(Scores) equals 11

AVERAGE(A1:A5, 5) equals 10

AVERAGE(A1:A5) equals SUM(A1:A5)/COUNT(A1.A5) equals 11

If C1 C3 is named OtherScores and contains the numbers 4, 18, and 7, then

AVERAGE(Scores, OtherScores) equals 10 5

## MAX

Returns the largest value in a set of values

**Syntax**

**MAX(number1,number2, )**

Number1,number2,  are 1 to 30 numbers for which you want to find the maximum value

- You can specify arguments that are numbers, empty cells, logical values, or text representations of numbers  Arguments that are error values or text that cannot be translated into numbers cause errors.

- If an argument is an array, or reference, only numbers in that array or reference are used  Empty cells, logical values, or text in the array or reference are ignored  If logical values and text must not be ignored, use MAXA instead

- If the arguments contain no numbers, MAX returns 0 (zero)

**Examples**

If A1 A5 contains the numbers 10, 7, 9, 27, and 2, then

MAX(A1.A5) equals 27

MAX(A1:A5,30) equals 30

## MIN

Returns the smallest number in a set of values

**Syntax**

**MIN(number1,number2, )**

Number1, number2,  are 1 to 30 numbers for which you want to find the minimum value

- You can specify arguments that are numbers, empty cells, logical values, or text representations of numbers. Arguments that are error values or text that cannot be translated into numbers cause errors

- If an argument is an array or reference, only numbers in that array or reference are used  Empty cells, logical values, or text in the array or reference are ignored  If logical values and text should not be ignored, use MINA instead

- If the arguments contain no numbers, MIN returns 0

**Examples**

If A1,A5 contains the numbers 10, 7, 9, 27, and 2, then.

MIN(A1 A5) equals 2

MIN(A1:A5, 0) equals 0

MIN is similar to MAX  Also see the examples for MAX

## MEDIAN

Returns the median of the given numbers  The median is the number in the middle of a set of numbers, that is, half the numbers have values that are greater than the median, and half have values that are less

**Syntax**

**MEDIAN(number1,number2, )**

Number1. number2, are 1 to 30 numbers for which you want the median

- The arguments should be either numbers or names. arrays. or references that contain numbers Microsoft Excel examines all the numbers in each reference or array argument

- If an array or reference argument contains text. logical values, or empty cells. those values are ignored. however. cells with the value zero are included

**Remarks**

If there is an even number of numbers in the set. then MEDIAN calculates the average of the two numbers in the middle See the second example following

**Examples**

MEDIAN(1, 2, 3, 4, 5) equals 3

MEDIAN(1, 2, 3, 4, 5, 6) equals 3 5, the average of 3 and 4

## MODE

Returns the most frequently occurring, or repetitive, value in an array or range of data Like MEDIAN, MODE is a location measure

**Syntax**

**MODE(number1,number2, )**

Number1, number2, are 1 to 30 arguments for which you want to calculate the mode You can also use a single array or a reference to an array instead of arguments separated by commas

**Remarks**

- The arguments should be numbers, names, arrays, or references that contain numbers

- If an array or reference argument contains text, logical values, or empty cells, those values are ignored, however, cells with the value zero are included

- If the data set contains no duplicate data points, MODE returns the #N/A error value

In a set of values, the mode is the most frequently occurring value, the median is the middle value, and the mean is the average value No single measure of central tendency provides a complete picture of the data Suppose data is clustered in three areas, half around a single low value, and half around two large values. Both AVERAGE and MEDIAN may return a value in the relatively empty middle, and MODE may return the dominant low value.

**Example**

MODE({5.6, 4, 4, 3, 2, 4}) equals 4

## STDEV

See Also

Estimates standard deviation based on a sample The standard deviation is a measure of how widely values are dispersed from the average value (the mean)

**Syntax**

**STDEV(number1.number2 )**

Number1,number2, are 1 to 30 number arguments corresponding to a sample of a population You can also use a single array or a reference to an array instead of arguments separated by commas

- Logical values such as TRUE and FALSE and text are ignored If logical values and text must not be ignored, use the STDEVA worksheet function

## Remarks

- STDEV assumes that its arguments are a sample of the population If your data represents the entire population, then compute the standard deviation using STDEVP

- The standard deviation is calculated using the "nonbiased" or "n-1" method

- STDEV uses the following formula

- 

## Example

Suppose 10 tools stamped from the same machine during a production run are collected as a random sample and measured for breaking strength The sample values (1345, 1301, 1368, 1322, 1310, 1370, 1318, 1350, 1303, 1299) are stored in A2 E3, respectively STDEV estimates the standard deviation of breaking strengths for all the tools

STDEV(A2:E3) equals 27 46

## About math and trigonometry functions

With math and trigonometry functions, you can perform simple calculations, such as rounding a number or calculating the total value for a range of cells, or complex calculations, such as calculating the total value for a range of cells that meet a condition in another range of cells

## ABS

Returns the absolute value of a number. The absolute value of a number is the number without its sign

## Syntax

## ABS(number)

Number is the real number of which you want the absolute value

## Examples

ABS(2) equals 2

ABS(-2) equals 2

If A1 contains -16, then

SQRT(ABS(A1)) equals 4

## LOG10

Returns the base-10 logarithm of a number

## Syntax

## LOG10(number)

Number is the positive real number for which you want the base-10 logarithm

**Examples**

LOG10(86) equals 1 934498451

LOG10(10) equals 1

LOG10(1E5) equals 5

LOG10(10^5) equals 5

## MOD

Returns the remainder after number is divided by divisor The result has the same sign as divisor

**Syntax**

**MOD(number,divisor)**

Number is the number for which you want to find the remainder

Divisor is the number by which you want to divide number If divisor is 0, MOD returns the #DIV/0! error value

**Remarks**

The MOD function can be expressed in terms of the INT function

MOD(n, d) = n - d*INT(n/d)

**Examples**

MOD(3, 2) equals 1

MOD(-3, 2) equals 1

MOD(3, -2) equals -1

MOD(-3, -2) equals -1

## SQRT

Returns a positive square root

**Syntax**

**SQRT(number)**

Number is the number for which you want the square root. If number is negative, SQRT returns the #NUM! error value

**Examples**

SQRT(16) equals 4

SQRT(-16) equals #NUM!

SQRT(ABS(-16)) equals 4

## SUM

Adds all the numbers in a range of cells

**Syntax**

**SUM(number1,number2, )**

Number1, number2, are 1 to 30 arguments for which you want the total value or sum

- Numbers, logical values, and text representations of numbers that you type directly into the list of arguments are counted See the first and second examples following

- If an argument is an array or reference, only numbers in that array or reference are counted Empty cells, logical values, text, or error values in the array or reference are ignored See the third example following

- Arguments that are error values or text that cannot be translated into numbers cause errors

**Examples**

SUM(3, 2) equals 5

SUM("3", 2, TRUE) equals 6 because the text values are translated into numbers, and the logical value TRUE is translated into the number 1

Unlike the previous example, if A1 contains "3" and B1 contains TRUE, then

SUM(A1, B1, 2) equals 2 because references to nonnumeric values in references are not translated

If cells A2 E2 contain 5, 15, 30, 40, and 50

SUM(A2.C2) equals 50

SUM(B2:E2, 15) equals 150

## PRODUCT

Multiplies all the numbers given as arguments and returns the product

**Syntax**

**PRODUCT(number1,number2, )**

Number1, number2, are 1 to 30 numbers that you want to multiply

**Remarks**

- Arguments that are numbers, logical values, or text representations of numbers are counted, arguments that are error values or text that cannot be translated into numbers cause errors

- If an argument is an array or reference, only numbers in the array or reference are counted Empty cells, logical values, text, or error values in the array or reference are ignored

**Examples**

If cells A2 C2 contain 5, 15, and 30

PRODUCT(A2 C2) equals 2,250

PRODUCT(A2.C2, 2) equals 4,500

**About charts**

Charts are visually appealing and make it easy for users to see comparisons, patterns, and trends in data. For instance, rather than having to analyze several columns of worksheet numbers, you can see at a glance whether sales are falling or rising over quarterly periods, or how the actual sales compare to the projected sales.

You can create a chart on its own sheet or as an embedded object on a worksheet. You can also publish a chart on a Web page. To create a chart, you must first enter the data for the chart on the worksheet. Then select that data and use the Chart Wizard to step through the process of choosing the chart type and the various chart options.

Worksheet data and chart

You can also create a chart in one step without using the Chart Wizard. When created this way, the chart uses a default chart type and formatting that you can change later.

A PivotChart report is an interactive summary of data in a chart format. It is created differently than regular Microsoft Excel charts. After you create a PivotChart report, you can view different levels of detail or reorganize the layout of the chart by dragging its fields and items. Learn about creating PivotChart reports

Return to top

## How worksheet data is represented in a chart

A chart is linked to the worksheet data it's created from and is updated automatically when you change the worksheet data.

### How worksheet data appears in a chart

**Axis values** Microsoft Excel creates the axis values from the worksheet data. Note that the axis values in the example above range from 0 to 140000, which encompasses the range of values on the worksheet. Unless you specify differently, Excel uses the format of the upper-left cell in the value range as the number format for the axis.

**Category names** Excel uses column or row headings in the worksheet data for category axis names. In the example above, the worksheet row headings 1st Quarter, 2nd Quarter, and so on appear as category axis names. You can change whether Excel uses column or row headings for category axis names or create different names.

**Chart data series names** Excel also uses column or row headings in the worksheet data for series names. Series names appear in the chart legend. In the example above, the row headings Projected and Actual appear as series names. You can change whether Excel uses column or row headings for series names or create different names.

**Data markers** Data markers with the same pattern represent one data series. Each data marker represents one number from the worksheet. In the example above, the rightmost data marker represents the Actual 4th Quarter value of 120000.

**Tips** A chart tip that tells you the name of a chart item appears when you rest the pointer over the chart item. For example, when you rest the pointer over the legend, the chart tip Legend appears.

## Embedded charts and chart sheets

You can create a chart on its own chart sheet or as an embedded chart on a worksheet. Either way, the chart is linked to the source data on the worksheet, which means the chart is updated when you update the worksheet data.

**Embedded charts** An embedded chart is considered a graphic object and is saved as part of the worksheet on which it is created. Use embedded charts when you want to display or print one or more charts with your worksheet data.

Embedded pie charts

**Chart sheets** A chart sheet is a separate sheet within your workbook that has its own sheet name. Use a chart sheet when you want to view or edit large or complex charts separately from the worksheet data or when you want to preserve screen space as you work on the worksheet

### Create a chart

You can create either an embedded chart or a chart sheet

1  Select the cells that contain the data that you want to appear in the chart

   If you want the column and row labels to appear in the chart, include the cells that contain them in the selection

2  Click **Chart Wizard**

3  Follow the instructions in the Chart Wizard

### Change the cell range used to create a chart

1  Click the chart you want to change

2  On the **Chart** menu, click **Source Data**, and then click the **Data Range** tab .

3  Make sure the entire reference in the **Data range** box is selected.

4  On the worksheet, select the cells that contain the data you want to appear in the chart

   If you want the column and row labels to appear in the chart, include the cells that contain them in the selection

### Change values in a chart

The values in a chart are linked to the worksheet from which the chart is created. The chart is updated when you change the data on the worksheet

1  Open the worksheet that contains the data plotted in the chart

2  In the cell that contains the value you want to change, type a new value

3  Press ENTER.

### Delete a data series

To delete data from both the worksheet and the chart, delete the data from the worksheet, the chart will be updated automatically. Use the following procedure to delete a data series from the chart without deleting the corresponding data from the worksheet

1  Click the data series you want to delete

2  Press DELETE

### Edit chart and axis titles

1.  Click the title you want to change

2  Type the new text you want

3  Press ENTER.

### Change category axis labels

• To change category axis labels on the worksheet, click the cell that contains the label name you want to change, type the new name, and then press ENTER

- To change category axis labels on the chart, click the chart, and then click **Source Data** on the **Chart** menu In the **Category axis labels** box on the **Series** tab, specify the worksheet range you want to use as category axis labels You can also type the labels you want to use, separated by commas, for example

  **Division A, Division B, Division C**

  If you type the label text in the **Category axis labels** box, the category axis text is no longer linked to a worksheet cell

Insert an imported picture or clip art

1  To insert a picture on a worksheet or <u>chart sheet</u>, click the <u>sheet tab</u> for the worksheet or chart sheet

   To insert a picture on an <u>embedded chart</u>, click the embedded chart

2  On the **Insert** menu, point to **Picture**, and then click **From File**

3  Locate the folder that contains the picture you want to insert

4  Double-click the picture

**What sorting does**  When you sort a <u>list</u>, Microsoft Excel rearranges rows according to the contents of a column you choose — the Sort By column

**Ascending sort**  To arrange a list alphanumerically using the data in one column, you can specify an ascending <u>sort order</u> (0 to 9, leading spaces, punctuation, A to Z) In the following example, sorting the list in ascending order by the "Sold by" column puts the names of the salespersons in alphabetical order

### Sort a list

**Sort rows in ascending order based on the contents of one column**

If you previously sorted a list on the same worksheet, Microsoft Excel uses the same sorting options unless you change them.

1  Click a cell in the column you would like to sort by

2  Click **Sort Ascending**

**Sort rows in descending order based on the contents of one column**

If you previously sorted a list on the same worksheet, Microsoft Excel uses the same sorting options unless you change them

1  Click a cell in the column you would like to sort by

2  Click **Sort Descending**

**Sort rows based on the contents of two or more columns**

For best results, the <u>list</u> you sort should have column labels

1  Click a cell in the list you want to sort

2  On the **Data** menu, click **Sort**

3  In the **Sort by** and **Then by** boxes, click the columns you want to sort

   If you need to sort by more than three columns, sort by the least important columns first  For example, if your list contains employee information and you need to organize it by Department, Title, Last Name, and First Name, sort the list twice  First, click **First Name** in the **Sort by** box and sort the list  Second, click **Department** in

the **Sort by** box, click **Title** in the first **Then by** box, and click **Last Name** in the second **Then by** box, and sort the list.

3   Select any other sort options you want, and then click **OK**

Repeat steps 2 through 4 if needed, using the next most important columns

**Notes**

- If the column you specify in the **Sort by** box has duplicate items, you can sort the values further by specifying another column in the first **Then by** box If there are duplicate items in the second column, you can specify a third column to sort by in the second **Then by** box

**When you sort rows that are part of a worksheet outline, Microsoft Excel sorts the highest-level groups (level 1) so that the detail rows or columns stay together, Sort columns based on the contents of rows**

1   Click a cell in the list you want to sort

2.  On the **Data** menu, click **Sort**

**Click Options**

3   Under **Orientation**, click **Sort left to right**, and then click **OK**

4   In the **Sort by** and **Then by** boxes, click the rows you want to sort

# PowerPoint – Presentation

## MS -PowerPoint Screen
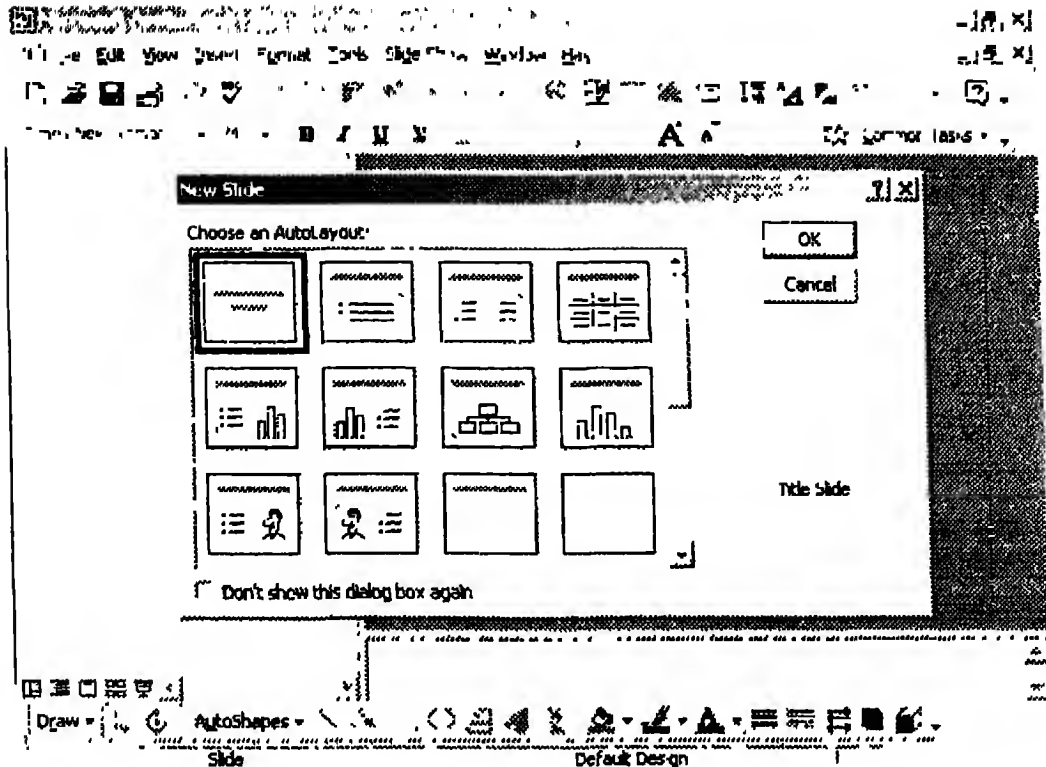


## Create a new presentation

You can create a new presentation in several ways You can start by working with the AutoContent wizard, in which you begin with a presentation that contains suggested content and design You can also start with an existing presentation and change it to suit your needs Another way to start a presentation is by selecting a design template that determines the presentation's design but doesn't include content You can also begin with an outline you import from another application or with a blank presentation that has neither suggested content nor design

## Create a presentation based on a design template

1   On the **File** menu, click **New**, and then click the **Design Templates** tab

2   Scroll to see all the design templates, click the one you want, and then click **OK**
3   Scroll to see the slide layouts, and then select a layout for your title slide

4   Type the title and any other content you want on the title slide

5   On the **Formatting** toolbar, click **Common Tasks**, click **New Slide**, and then select a layout for the next slide

6   Add the content you want

7   Repeat steps 5 and 6 for each new slide

8   When you finish, click **Save** on the **File** menu

9   Name your presentation, and then click **Save**


**Tip**  To see how your slide show will look, click **Slide Show**     at the lower left of the PowerPoint window

Open a presentation on your hard disk or a network


1   On the **Standard** toolbar, click **Open**

2.  Click a shortcut on the Places Bar or, in the **Look in** box, click the drive, folder, or Internet location that contains the presentation you want

3.  In the folder list, locate and open the folder that contains the presentation
4.  Double-click the presentation you want to open

**Tip**  To open a file you've used recently, click the file name at the bottom of the **File** menu

**Save a new or existing presentation**

**Click Save**

**Note**  If you're saving the presentation for the first time, you'll be asked to give it a name

**Close a presentation**

•   On the **File** menu, click **Close**

**Note**  If you're saving the presentation for the first time, you'll be asked to give it a name

**Quit or exit PowerPoint**

•   On the **File** menu, click **Exit**

**PowerPoint views**

Microsoft PowerPoint comes with different views to help you while you are creating a presentation  The two main views you use in PowerPoint are normal view and slide sorter view  To easily switch between views, you click the buttons at the lower left of the PowerPoint window

Normal view

Normal view contains three panes  the outline pane, the slide pane, and the notes pane  These panes let you work on all aspects of your presentation in one place  You can adjust the size of the different panes by dragging the pane borders

**Outline pane** Use the outline pane to organize and develop the content of your presentation You can type all of the text of your presentation and rearrange bullet points, paragraphs, and slides

**Slide pane** In the slide pane, you can see how your text looks on each slide You can add graphics, movies, and sounds, create hyperlinks, and add animations to individual slides

**Notes pane** The notes pane lets you add your speaker notes or information you want to share with the audience If you want to have graphics in your notes, you must add the notes in notes page view

These three panes are also displayed when you save your presentation as a Web page The only difference is that the outline pane displays a table of contents so that you can navigate through your presentation

## Slide sorter view

In slide sorter view, you see all the slides in your presentation on screen at the same time, displayed in miniature This makes it easy to add, delete, and move slides, add timings and select animated transitions for moving from slide to slide You can also preview animations on multiple slides by selecting the slides you want to preview and then clicking **Animation Preview** on the **Slide Show** menu

At any time while you are creating your presentation, you can start your slide show and

preview your presentation by clicking **Slide Show**

### View slide miniatures in slide sorter view

In slide sorter view, you see the entire presentation displayed in miniature You can add slide transitions and preview slide transitions, animations, and timings

Do one of the following

- On the **View** menu, click **Slide Sorter**

- Click **Slide Sorter View**      at the lower left of the PowerPoint window

### Ways to organize my content in an outline

In the outline pane, your presentation appears as an outline made up of the titles and main text from each slide You can type an outline in PowerPoint, begin with an outline from the AutoContent Wizard, or import an outline from another program, such as Microsoft Word

Each slide title appears next to a number and an icon Body text, indented up to five levels, appears below each title

Working with an outline is the best way to organize and develop the content of your presentation because you can see all titles and main text on the screen as you work You can rearrange points within a slide, move entire slides from one position to another, and edit titles and body text For example, to rearrange slides or bullet items, just select the slide icon or bullet for the text you want to move, and then drag it to its new location

When you select text in the outline pane, buttons for working with outlines become available on the **Standard** and **Formatting** toolbars You can use these buttons to quickly organize your presentation — for example, click **Promote** or **Demote** to increase or decrease the indent level of a bullet You can click **Show Formatting** to turn formatting on or off in the outline. **Expand All** lets you show all the details in your outline or see just slide titles

You can also display all the buttons for working with outlines on a single toolbar On the **View** menu, point to **Toolbars**, and then click **Outlining**

### Insert a new slide

1    On the **Insert** menu, click **New Slide**

2    Scroll through the layouts, and then click the one you want

### Copy a slide from one presentation to another

1    Display the slide that will precede the slide you want to insert

2    On the **Insert** menu, click **Slides from Files**

3    Find and select the presentation you want to copy a slide from

4    Click **Display**

5    Select the slide or slides you want to copy, and then click **Insert**

To copy an entire presentation, click **Insert All**

### Duplicate slides within a presentation

1    Select the slide or slides you want to duplicate

2    On the **Insert** menu, click **Duplicate Slide**

**Tip** You can also duplicate slides by using the keyboard shortcut CTRL+SHIFT+D

### Delete a slide

1    Select the slide you want to delete

2    On the **Edit** menu, click **Delete Slide**

**Tip** To delete multiple slides, switch to slide sorter view Hold down CTRL while you click the slides, and then click **Delete Slide**

### Add text

Most often, the easiest way to add text to a slide is to type it directly into any placeholder on the slide If you want to add text outside a placeholder or shape you can use the **Text Box**

button        on the **Drawing** toolbar You can also add text to an AutoShape or add a WordArt drawing object for a special text effect

## Make text a specific size

    1   Select the text you want to change

    2   In the **Font Size** box    ,-click the point size you want

## Make text larger

    1   Select the text you want to change

    2   Click **Increase Font Size**

## Make text bold

    1   Select the text you want to change

    2   Click **B** option on formatting toolbar

## Make text italic

    1   Select the text you want to change

    2   Click *I* option on formatting toolbar

## Underline text

    1   Select the text you want to underline

    2  Click on <u>U</u> option on formatting toolbar

## Change capitalization

    1   Select the text you want to change

    2   On the **Format** menu, click **Change Case**
    3.   Click the option you want

## Change text color

    1   Select the text you want to change

    2   On the **Drawing** toolbar, click the arrow next to **Font Color**

    3.   To change the text color back to its default, click **Automatic**

To change to a color in the color scheme, click one of the eight colors below **Automatic**

To change to a color that isn't in the color scheme, click **More Font Colors**. Click the color you want on the **Standard** tab, or click the **Custom** tab to mix your own color, and then click **OK**

## Insert a symbol or special character

1   On the **Insert** menu, click **Symbol**

To change fonts, click a name in the **Font** box

2   Click the symbol or character you want, and then click **Insert**

**Tip**   If you know the character code for the symbol or character, make sure NUM LOCK is on, hold down ALT, and then use the numeric keypad to type 0 (zero) followed by the character code

## Cancel or undo an action

1   Click the arrow next to **Undo**       to see the most recent actions you can undo You can scroll to see more actions

2   Click the action you want to undo

When you undo an action, you also undo all actions listed above it

**Tip**   If you change your mind after you click **Undo**, you can click **Redo**       to restore the action

## Move or copy text by dragging

1   Select the text you want to move or copy

2   To move the text, drag it to its new location

To copy the text, hold down CTRL and drag the copy to its new l

## Repeat my last action

•   On the **Edit** menu, click **Repeat**

## Select text

| Do this | To select |
| --- | --- |
| Double-click the word | A word |
| Triple-click anywhere in the paragraph | A paragraph or (in the outline pane) a paragraph and all its subparagraphs |

.

55

| Click | All text on a single slide in the outline pane |
| Press CTRL+A | All text in an object or (in the outline pane) an entire outline |

## Find text

1   On the **Edit** menu, click **Find**

2   In the **Find what** box, enter the text you want to search for

3   Click **Find Next**

**Tip**   To cancel a search in progress, press ESC

## Replace text

1   On the **Edit** menu, click **Replace**

2   In the **Find what** box, enter the text you want to find and replace

3   In the **Replace with** box, enter the text you want to use as the replacement.

4   To search for the next occurrence of the text, click **Find Next**.

To replace the next occurrence of the text, click **Replace**

To replace all occurrences of the text, click **Replace All**

**Tip**   To cancel a search in progress, press ESC

## Add bullets or numbering to text

1   Select the text or placeholder you want to add bullets or numbering to

2   Do one of the following
3   To add bullets, click **Bullets**

4   To add numbers, click **Numbering**

**Notes**

- You can also start a numbered list by typing. First, press BACKSPACE to remove any bullets at the beginning of the line Next, type a number one (1), letter A or a, or roman numeral one (I or i) followed by a period or closing parenthesis Type the text you want after the letter or number and then press ENTER to start a new line The numbering continues automatically

- To change the default settings for bullets or numbering, make the changes on the

## Remove or interrupt bullets and numbering

56

1   Select the text or <u>placeholder</u> you want to remove bullets or numbers from

2   Click **Bullets** or **Numbering**

**Notes**

- You can also press BACKSPACE to remove a bullet or numbering from an item in a list

- PowerPoint automatically adjusts the number sequence of a numbered list

- If you want to reorganize the elements of the list after removing bullets or numbering. use the **Promote** and **Demote** buttons on the **Formatting** toolbar

## <u>Add space before a paragraph</u>

1   In the slide pane, click anywhere in the paragraph you want to add space before

2   On the **Format** menu, click **Line Spacing**

Under **Before paragraph**, enter the amount of spacing you want, and then click **Lines** or **Points**

## Add space after a paragraph

1   In the slide pane, click anywhere in the paragraph you want to add space after

2   On the **Format** menu, click **Line Spacing**

Under **After paragraph**, enter the amount of spacing you want, and then click **Lines** or **Points**

## <u>Center the lines in a paragraph</u>

1   In the slide pane, select the text you want to center

2   Click **Center Alignment**

## <u>Left align a paragraph</u>

1   In the slide pane, click the text you want to left align

2   Click **Left Alignment**

## <u>Right align a paragraph</u>

1   In the slide pane, select the text you want to right align

2   Click **Right Alignment**

## Justify a paragraph

1 In the slide pane, select the text you want to justify

2 On the **Format** menu, point to **Alignment**, and then click **Justify**

## Change the line spacing within a paragraph

1 In the slide pane, click anywhere in the paragraph whose spacing you want to change

2 On the **Format** menu, click **Line Spacing**
3 Under **Line spacing**, enter the amount of spacing you want, and then click **Lines** or **Points**

## Check spelling

You can check spelling automatically, either as you type or at any other time — for example, after you finish creating your slides When you check spelling automatically, wavy underlines indicate possible spelling errors If the lines clutter your slide, you can hide them temporarily until you're ready to correct the errors

You can also check the spelling of text in different languages PowerPoint shares dictionaries of other languages and other supplemental dictionaries when installed by other programs in Microsoft Office, such as Word

### Check spelling as I type

1 On the **Tools** menu, click **Options**, and then click the **Spelling and Style** tab

2 Select the **Check spelling as you type** check box

As you type, a wavy line appears under each word that is not in the PowerPoint dictionary

**Tip** To correct the spelling, right-click a wavy line, and then click the option you want on the shortcut menu

## Create notes and handouts

### Type notes while working on a presentation

1 Click the notes pane, and then type your notes for the current slide

To see more of the notes pane, point to the top border of the notes pane until the

pointer becomes a double-headed arrow , and then drag until the pane is the size you want

2 Use the outline pane to move to other slides you want to add notes to

**Tip** You can add drawing objects and pictures to notes pages To do this, click **Notes Page** on the **View** menu, and then add the items you want Drawing objects and pictures are not displayed in the notes pane, but appear when you work in notes page view or when you print slides with notes

## Print slides, notes, or handouts

1   On the **File** menu. click **Print**

2   In the **Print what** box, click the item you want to print

    If you select **Handouts**, you can then select a number of slides per page and whether the order should be horizontal or vertical

3   Select any other options you want

## Print an outline

When you print an outline. character formatting (such as bold or italic) will appear. regardless of whether it's hidden in the outline pane in normal view

1   Open the presentation you want to print

2   Do any or all of the following

    To print only the slide titles or to print all levels of text, click **Expand All**       on the **Standard** toolbar to either display just slide titles or display all the text in the outline pane

    To add headers and footers to your printed outline, click **Header and Footer** on the **View** menu, click the **Notes and Handouts** tab, and then select the options you want The headers and footers are added to handouts and notes pages. as well as to the printed outline

3   On the **File** menu, click **Print**

4   Under **Print what,** click **Outline view**, and select any other options you want

## Print slides in grayscale or in black and white

1   On the **File** menu, click **Print**

2   Do one of the following

    To print in grayscale, select the **Grayscale** check box.

    To hide all shades of gray and print in pure black and white. select the **Pure black and white** check box.

## Insert a picture from the Clip Gallery

1   Display the slide you want to add a picture to

2   Click **Insert Clip Art** on the **Drawing** toolbar, and then click the **Pictures** tab

3   Click the category you want

.  4   Click the picture you want, and then click **Insert Clip**       on the shortcut menu

5   When you are finished using the Clip Gallery, click the **Close** button on the Clip
    Gallery title bar

**Note**   You can also drag a picture from the Clip Gallery to your

## Computer-based slide show design guidelines

When you give a slide show on a computer, you can use special visual, sound, and animation
effects Moderation is the key when adding special effects to your presentation You want the
effects you use — such as animations and transitions — to emphasize your points, not draw
the audience's attention to the effects themselves

There are also many different ways you can give a computer-based presentation For
example, you can set it up at a kiosk, present it live in front of an audience, or broadcast or
publish it on the Web

## Animations and transitions

Transitions are special effects that introduce a slide in a slide show You can choose from a
variety of transitions and vary their speed You can change the transition effect to indicate a
new section of a presentation or to emphasize a certain slide

Animations are special sound or visual effects that you can add to text or other objects, such
as a chart or picture If your audience uses a language that reads from left to right, you might
design your animated slides so that your points appear from the left Then, to emphasize a
particular point, bring it in from the right. The change will grab the audience's attention and
reinforce your point

### Music, sounds, and videos

An occasional burst of music or sound during a transition or animation can focus the
audience on the slide show You can also play videos that might include part of a company's
commercial or training film. But remember not to overdo it — frequent use of special effects
can draw attention away from the content of your presentation

### Voice narration

You might want to add narration to a slide show for individuals who can't attend a
presentation, for self-running slide shows, for gaining access to a slide show on the Internet,
or for archiving a meeting so that presenters can review it later and hear comments made
during the presentation

### Pace and rehearsing

The pace of your presentation affects audience response — going too fast exhausts audience
members, and going too slow puts them to sleep You can use PowerPoint features to fine-
tune your pace before you give a presentation

While you rehearse, you can also check your slides' visual impact Too many words or
pictures on one slide can distract the audience If you find yourself using too much text, try
dividing one slide into two or three and then increasing the font size

To see a presentation that incorporates the ideas above, take a look at our example on the
Web

## Animate text and objects

1  In normal view, display the slide that has the text or objects you want to animate

2  On the **Slide Show** menu, click **Custom Animation**, and then click the **Effects** tab

   If you are animating a chart created in Microsoft Graph, click the **Chart Effects** tab.

3. Under **Check to animate slide objects**, select the check box next to the text or object you want to animate   ·

4  Under **Entry animation and sound** and **Introduce text** (if you are animating text), select the options you want

   For Help on an option, click the question mark and then click the option

5  Repeat steps 3 and 4 for every object you want to animate

6  Click the **Order and Timing** tab

7  To change the order of animation, select the object you want to change under **Animation order**, and then click one of the arrows to move the object up or down in the list

8  To set the timing, select the object and then do one of the following

   To start the animation by clicking the text or object, click **On mouse click**

   To start the animation automatically, click **Automatically**, and then enter the number of seconds you want to have elapse between the previous animation and the current one

9. To preview animations, click **Preview**

**Tip**  A quick way to create basic animation is to select the object you want to animate (in normal view), click the **Slide Show** menu, point to **Preset Animation**, and then click the option you want

## Edit a text or object animation

1  Display the slide in which you want to change an animation

2  On the **Slide Show** menu, click **Custom Animation**

3  Under **Check to animate slide objects**, select the object you want to change  To remove the animation from the object, clear the check box next to the object name

4  On the **Effects** and **Order and Timing** tabs, make the changes you want

5  Repeat steps 3 and 4 for each object you want to change

6  To preview the changes you made, click **Preview**

## Animate the elements of a chart

You can animate the elements of a chart created with Microsoft Graph or Microsoft Excel
For information about adding a chart to a presentation. click

-

1   Select the chart you want to animate

2   On the **Slide Show** menu. click **Custom Animation**, and then click the **Chart Effects**
    tab

3   Under **Introduce chart elements**, select how you want to animate the chart
    :

    Options in the list change depending on the type of chart selected

4   Under **Entry animation and sound**, select the options you want


    For Help on an option, click the question mark        and then click the option

5   Click the **Order and Timing** tab

6   To change the order of animation, select the chart under **Animation order**, and then
    click one of the arrows to move the chart up or down in the list

7   To set the timing, select the chart and then do one of the following

    To start the animation by clicking the text or object, click **On mouse click**

    To start the animation automatically, click **Automatically**, and then enter the number
    of seconds you want to have elapse between the previous animation and the current
    one  The timing you set is also the time that will elapse between

## Preview animation and transition effects in a slide

1.  Display the slide you want to preview

2   On the **Slide Show** menu, click **Animation Preview**

    The transition and animation play in the Animation Preview window that appears  To
    replay the effects, click the Animation Preview window

**Tip**  To preview animations on multiple slides, switch to slide sorter view, select the slides
you want to preview, and then click **Animation Preview** on the **Slide Show** menu

## Insert a CD audio track on a slide

**Note**  You don't need to insert the CD in the CD-ROM drive for this procedure.

1   Display the slide you want to add a CD audio track to

2   On the **Insert** menu, point to **Movies and Sounds**, and then click **Play CD Audio
    Track**

3   Select the track and timing options you want, and then click **OK**


,   ·_     A CD icon       appears on the slide

4. A message is displayed. If you want the CD to play automatically when you move to the slide, click **Yes**. if you want the CD to play only when you click the CD icon during a slide show. click **No** .

5 To preview the music in normal view, double-click the CD icon

**Tip** You can also change play settings — for example, to change the tracks you want to play, or to add an animation effect to the CD icon

### Insert music or sound on a slide

1 Display the slide you want to add music or sound to

2 On the **Insert** menu, point to **Movies and Sounds**

3 Do one of the following

To insert a sound from the Clip Gallery, click **Sound from Gallery**, and then locate and insert the sound you want

To insert a sound from another location, click **Sound from File**, locate the folder that contains the sound, and then double-click the sound you want

A sound icon      appears on the slide

4 A message is displayed If you want the sound to play automatically when you go to the slide, click **Yes**, if you want the sound to play only when you click the sound icon during a slide show, click **No**

5 To preview the sound in normal view, double-click the sound icon

**Tip** You can also change play settings — for example, loop the sound or add an animation effect to your sound

### Insert a video on a slide

1. Display the slide you want to add the video to

2 On the **Insert** menu, point to **Movies and Sounds**

3 Do one of the following

To insert a video from the Clip Gallery, click **Movie from Gallery**, and then locate and insert the video you want

To insert a video from another location, click **Movie from File**, locate the folder that contains the video, and then double-click the video you want

4 A message is displayed If you want the movie to play automatically when you move to the slide, click Yes, if you want the movie to play only when you click the movie during a slide show, click No

5 To preview the movie in normal view. double-click the movie

**Tip**  You can also <u>change play settings</u> — for example, loop the movie or add an animation effect to your movie

### Different ways to deliver a presentation

### On-screen presentations

You can use all of the PowerPoint special effects and features to make an online (electronic) presentation exciting and complete  You can use such things as slide transitions, timings, movies, sounds, animation, and hyperlinks  After you decide that you are going to use a computer to give your presentation, you have many options on how to deliver it

**Presentation with a live speaker**  If you are presenting in a large room by using a monitor or projector, PowerPoint has a Projector Wizard that will automatically set and restore correct screen resolution for the target projection system

**Self-running presentation**  You might want to set up a presentation to run unattended in a booth or kiosk at a trade show or convention  You can make most controls unavailable so that users can't make changes to the presentation  A self-running presentation restarts when it's finished and also when it's been idle on a manually advanced slide for longer than five minutes

**Online meeting**  Using the Microsoft NetMeeting program with PowerPoint allows you to share a presentation and exchange information with people at different sites in <u>real time</u> as if everyone were in the same room (**Tools** menu, **Online Collaboration** submenu)

In an online meeting, you can share programs and documents, send text messages in <u>Chat</u>, transfer files, and work on the <u>Whiteboard</u>  By collaborating, participants can take control of the presentation to review and edit its contents  During an online meeting, only one person can control the presentation at a time, but multiple users can work in Chat or the Whiteboard simultaneously if collaboration is turned off

**Presentation broadcasting**  You can broadcast a presentation, including video and audio, over the Web (**Slide Show** menu, **Online Broadcast** submenu)  You can use broadcasting for a company meeting, presenting to remote groups, or holding a team meeting whose participants are at several different locations  By using Microsoft Outlook or any other e-mail program, you schedule the broadcast just like any other meeting  The presentation is saved in <u>Hypertext Markup Language (HTML)</u> format, so all that your audience needs in order to see the presentation is Microsoft Internet Explorer 4 0 or later  If an audience member misses a broadcast or you want to archive it, the broadcast can be recorded and saved on a Web server where it's available for playback at any time

### Presentations on the Web

You can design your presentation specifically for the World Wide Web, and then easily publish it by using the **Save as Web Page** command (**File** menu)  To publish a presentation means to place a copy of the presentation in HTML format on the Web  You can publish copies of the same presentation to different locations  You can publish a complete presentation, a custom show, a single slide, or a range of slides

You can choose to present in PowerPoint itself, or you can save the presentation in HTML format and use Internet Explorer 4 0 or later as your presentation tool  A button even opens the presentation in full-screen mode, hiding all browser window elements

Because navigation is a critical element in a presentation, PowerPoint presentations in HTML format include a navigation bar that you can use to move through the slides by using the outline pane

## Overhead transparencies

You can create a presentation that uses overhead transparencies by printing your slides as black-and-white or color transparencies You can design these slides in either landscape or portrait orientation

## Paper printouts

You can design your presentation so that it looks great both on the screen in color and when printed in grayscale or pure black and white on a laser printer

You can preview and change what your presentation will look like when printed in black and white To adjust the colors so that they print best in black and white, click **Grayscale**

**Preview** on the **Standard** toolbar In normal view, right-click any object on the slide, point to **Black and White** on the shortcut menu, and then click the option you want The changes you make while working in black-and-white view don't affect the colors in your on-screen presentation

## 35mm slides

A service bureau can transform your electronic slides into 35mm slides Contact your local service bureau for instructions Or if you're in the United States, you can have Genigraphics prepare your slides Point to **Send To** on the **File** menu, click **Genigraphics**, and then follow the instructions in the Genigraphics Wizard

## Notes, handouts, and outlines

To support your presentation, you can give your audience handouts — smaller versions of your slides that are printed two, three, or six slides to a page You can also print your speaker notes for the audience Click **Print** on the **File** menu, and then click **Handouts** or **Notes pages** in the **Print what** box

As you're working on a presentation, you can print your outline, including slide titles and main points In addition, you can use the **Microsoft Word** command (**File** menu, **Send To** submenu) to send your slide images and notes to Microsoft Word, and then use Word features to enhance their appearance

## Start a slide show from within PowerPoint

Do any of the following

Click **Slide Show** icon at the lower left of the PowerPoint window

OR

- On the **Slide Show** menu, click **View Show**

OR

- On the **View** menu, click **Slide Show**

OR

- Press F5

# INTRODUCTION TO THE INTERNET:-

## I   INTRODUCTION

Internet, computer-based global information system. The Internet is composed of many interconnected computer networks. Each network may link tens, hundreds, or even thousands of computers, enabling them to share information with one another and to share computational resources such as powerful supercomputers and databases of information. The Internet has made it possible for people all over the world to effectively and inexpensively communicate with one another Unlike traditional broadcasting media, such as radio and television, the Internet does not have a centralized distribution system Instead, an individual who has Internet access can communicate directly with anyone else on the Internet, make information available to others, find information provided by others, or sell products with a minimum overhead cost.

The Internet has brought new opportunities to government, business, and education Governments use the Internet for internal communication, distribution of information, and automated tax processing In addition to offering goods and services online to customers, businesses use the Internet to interact with other businesses Many individuals use the Internet for shopping, paying bills, and online banking. Educational institutions use the Internet for research and to deliver courses to students at remote sites

The Internet's success arises from its flexibility Instead of restricting component networks to a particular manufacturer or particular type, Internet technology allows interconnection of any kind of computer network. No network is too large or too small, too fast or too slow to be interconnected Thus, the Internet includes inexpensive networks that can only connect a few computers within a single room as well as expensive networks that can span a continent and connect thousands of computers

Internet service providers (ISPs) provide Internet access to customers for a monthly fee. A customer who subscribes to an ISP's service uses the ISP's network to access the Internet. Because ISPs offer their services to the general public, the networks they operate are known as public access networks In the United States, as in many countries, ISPs are private companies; in countries where telephone service is a government-regulated monopoly, the government often controls ISPs.

An organization that has many computers usually owns and operates a private network, called an intranet, that connects all the computers within the organization. To provide Internet service, the organization connects its intranet to the Internet. Unlike public access networks, intranets are restricted to provide security. Only authorized computers at the organization can connect to the intranet, and the organization restricts communication between the intranet and the global Internet The restrictions allow computers inside the organization to exchange information but keep the information confidential and protected from outsiders.

The Internet has grown tremendously since its inception, doubling in size every 9 to 14 months. In 1981 only 213 computers were connected to the Internet By 2000 the number had grown to more than 100 million. The current number of people who use the Internet can only be estimated One survey found that there were 61 million Internet users worldwide at the end of 1996, 148 million at the end of 1998, and 407 million by the end of 2000. Some analysts estimate that the number of users will double again by the end of 2002
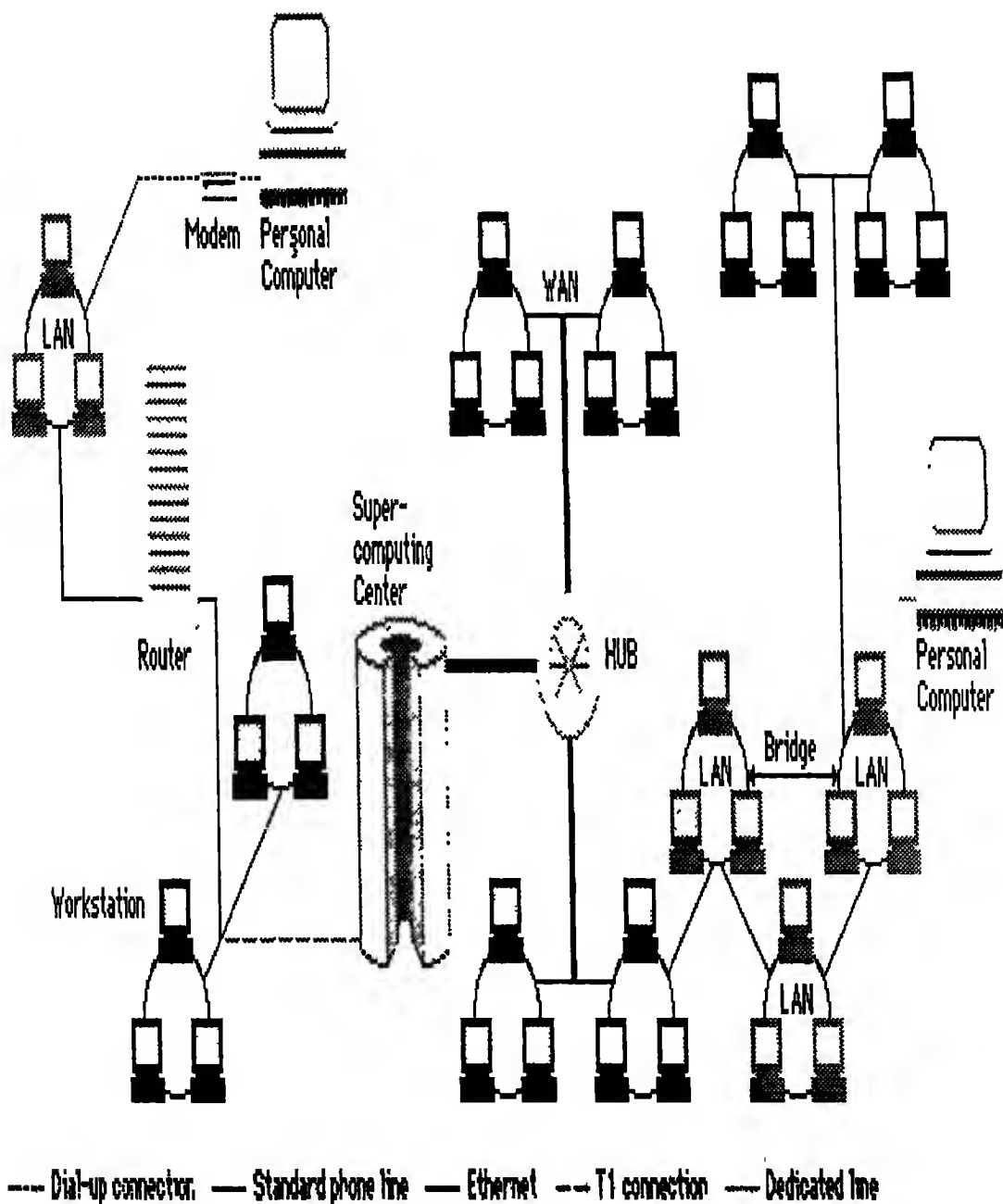
**Fig:- Internet Topology:-**

Connecting individual computers to each other creates networks. The Internet is a series of interconnected networks. Personal computers and workstations are connected to a Local Area Network (LAN) by either a dial-up connection through a modem and standard phone line or by being directly wired into the LAN. Other modes of data transmission that allow for connection to a network include T-1 connections and dedicated lines. Bridges and hubs link multiple networks to each other. Routers transmit data through networks and determine the best path of transmission.

## II  USES OF THE INTERNET

From its inception in the 1970s until the late 1980s the Internet was a U S government-funded communication and research tool restricted almost exclusively to academic and military uses. As government restrictions were lifted in the early 1990s, the Internet became commercial In 1995 the World Wide Web (WWW) replaced file transfer as the application used for most Internet traffic The difference between the Internet and the Web is similar to the distinction between a highway system and a package delivery service that uses the highways to move cargo from one city to another. The Internet is the highway system over which Web traffic and traffic from other applications move The Web consists of programs running on many computers that allow a user to find and display multimedia documents (documents that contain a combination of text, photographs, graphics, audio, and video). Many analysts attribute the explosion in use and popularity of the Internet to the visual nature of Web documents By the end of 2000, Web traffic dominated the Internet—more than 80 percent of all traffic on the Internet came from the Web

Companies, individuals, and institutions use the Internet in many ways Companies use the Internet for electronic commerce, also called e-commerce, including advertising, selling, buying, distributing products, and providing customer service. In addition, companies use the Internet for business-to-business transactions, such as exchanging financial information and accessing complex databases Businesses and institutions use the Internet for voice and video conferencing and other forms of communication that enable people to *telecommute* (work away from the office using a computer). The use of electronic mail (e-mail) speeds communication between companies, among coworkers, and among other individuals. Media and entertainment companies use the Internet for online news and weather services and to broadcast audio and video, including live radio and television programs. Online chat allows people to carry on discussions using written text Scientists and scholars use the Internet to communicate with colleagues, perform research, distribute lecture notes and course materials to students, and publish papers and articles Individuals use the Internet for communication, entertainment, finding information, and buying and selling goods and services.

### III  HOW THE INTERNET WORKS

#### A  Internet Access

The term *Internet access* refers to the communication between a residence or a business and an ISP that connects to the Internet Access falls into two broad categories: dedicated and dial-up With dedicated access, a subscriber's computer remains directly connected to the Internet at all times by a permanent, physical connection. Most large businesses have high-capacity dedicated connections; small businesses or individuals who desire dedicated access choose technologies such as digital subscriber line (DSL) or cable modems, which both use existing wiring to lower cost A DSL sends data across the same wires that telephone service uses, and cable modems use the same wiring that cable television uses. In each case, the electronic devices that are used to send data over the wires employ separate frequencies or channels that do not interfere with other signals on the wires Thus, a DSL Internet connection can send data over a pair of wires at the same time the wires are being used for a telephone call, and cable modems can send data over a cable at the same time the cable is being used to receive television signals The user usually pays a fixed monthly fee for a dedicated connection. In exchange, the company providing the connection agrees to relay data between the user's computer and the Internet.

Dial-up is the least expensive access technology, but it is also the least convenient. To use dial-up access, a subscriber must have a telephone modem, a device that connects a computer to the telephone system and is capable of converting data into sounds and sounds back into data. The user's ISP provides software that controls the modem. To access the Internet, the user opens the software application, which causes the dial-up modem to place a toll-free telephone call to the ISP. A modem at the ISP answers the call, and the two modems use audible tones to send data in both directions. When one of the modems is given data to send, the modem converts the data from the digital values used by computers—numbers stored as a sequence of 1s and 0s—into tones. The receiving side converts the tones back into digital values. Unlike dedicated access technologies, a dial-up modem does not use separate frequencies, so the telephone line cannot be used for regular telephone calls at the same time a dial-up modem is sending data.

## B    How Information Travels Over the Internet

All information is transmitted across the Internet in small units of data called packets. Software on the sending computer divides a large document into many packets for transmission, software on the receiving computer regroups incoming packets into the original document. Similar to a postcard, each packet has two parts a packet header specifying the computer to which the packet should be delivered, and a packet payload containing the data being sent. The header also specifies how the data in the packet should be combined with the data in other packets by recording which piece of a document is contained in the packet

A series of rules known as computer communication protocols specify how packet headers are formed and how packets are processed. The set of protocols used for the Internet are named TCP/IP after the two most important protocols in the set the Transmission Control Protocol and the Internet Protocol. Hardware devices that connect networks in the Internet are called IP routers because they follow the IP protocol when forwarding packets. A router examines the header in each packet that arrives to determine the packet's destination. The router either delivers the packet to the destination computer across a local network or forwards the packet to another router that is closer to the final destination. Thus, a packet travels from router to router as it passes through the Internet

TCP/IP protocols enable the Internet to automatically detect and correct transmission problems. For example, if any network or device malfunctions, protocols detect the failure and automatically find an alternative path for packets to avoid the malfunction. Protocol software also ensures that data arrives complete and intact. If any packets are missing or damaged, protocol software on the receiving computer requests that the source resend them. Only when the data has arrived correctly does the protocol software make it available to the receiving application program, and therefore to the user

## C    Network Names and Addresses

To be connected to the Internet, a computer must be assigned a unique number, known as its IP (Internet Protocol) address. Each packet sent over the Internet contains the IP address of the computer to which it is being sent. Intermediate routers use the address to determine how to forward the packet. Users almost never need to enter or view IP addresses directly. Instead, to make it easier for users, each computer is also assigned a domain name; protocol software automatically translates domain names into IP addresses. For example, the domain name *encarta msn.com* specifies a computer owned by Microsoft (names ending in *com* are assigned to computers owned by commercial companies), and the corresponding IP address is 207 46 228 91 *See also* Domain Name System

Users encounter domain names when they use applications such as the World Wide Web. Each page of information on the Web is assigned a URL (Uniform Resource Locator) that includes the domain name of the computer on which the page is located For example, a user can enter the URL

http://encarta.msn.com/category/physcience.asp

to specify a page in the domain encarta.msn.com. Other items in the URL give further details about the page For example, the string *http* specifies that a browser should use the http protocol, one of many TCP/IP protocols, to fetch the item. The string *category/physcience.asp* specifies a particular document.

## D    Electronic Mail and News Groups

Electronic mail, or e-mail, is a widely used Internet application that enables individuals or groups of individuals to quickly exchange messages, even if the users are geographically separated by large distances A user creates an e-mail message and specifies a recipient using an e-mail address, which is a string consisting of the recipient's login name followed by an @ (at) sign and then a domain name E-mail software transfers the message across the Internet to the recipient's computer, where it is placed in the specified mailbox, a file on the hard drive. The recipient uses an e-mail application to view and reply to the message, as well as to save or delete it Because e-mail is a convenient and inexpensive form of communication, it has dramatically improved personal and business communications

In its original form, e-mail could only be sent to recipients named by the sender, and only text messages could be sent. E-mail has been extended in two ways, and is a much more powerful tool. Software has been invented that can automatically propagate to multiple recipients a message sent to a single address Known as a mail gateway or list server, such software allows individuals to join or leave a mail list at any time. Such software can be used to create lists of individuals who will receive announcements about a product or service or to create online discussion groups. Of particular interest are Network News discussion groups (newsgroups) that were originally part of the Usenet network. Thousands of newsgroups exist, on an extremely wide range of subjects Messages to a newsgroup are not sent directly to each user Instead, an ordered list is disseminated to computers around the world that run news server software. Newsgroup application software allows a user to obtain a copy of selected articles from a local news server or to use e-mail to post a new message to the newsgroup The system makes newsgroup discussions available worldwide.

E-mail software has also been extended to allow the transfer of nontext documents, such as graphics and other images, executable computer programs, and prerecorded audio Such documents, appended to an e-mail message, are called attachments The standard used for encoding attachments is known as Multipurpose Internet Mail Extensions (MIME) Because the Internet e-mail system only transfers printable text, MIME software encodes each document using printable letters and digits before sending it and then decodes the item when e-mail arrives Most significantly, MIME allows a single message to contain multiple items, allowing a sender to include a cover letter that explains each of the attachments

## E    Other Internet Applications

Although the World Wide Web is the most popular application, other Internet applications are widely used For example, the Telnet application enables a user to

interactively access a remote computer. Telnet gives the appearance that the user's keyboard and screen are connected directly to the remote computer. For example, a businessperson who is visiting a location that has Internet access can use Telnet to contact their office computer Doing so is faster and less expensive than using dial-up modems.

The Internet can also be used to transfer telephone calls using an application known as IP-telephony. This application requires a special phone that digitizes voice and sends it over the Internet to a second IP telephone Another application, known as the File Transfer Protocol (FTP), is used to download files from an Internet site to a user's computer. The FTP application is often automatically invoked when a user downloads an updated version of a piece of software. Applications such as FTP have been integrated with the World Wide Web, making them transparent so that they run automatically without requiring users to open them. When a Web browser encounters a URL that begins with ftp.// it automatically uses FTP to access the item

To connect to the network

4.  Open Network and Dial Up connections
5   Double-click the connection you want to connect to the network
6   If you are prompted, in the **Connect** *connection type* dialog box, type your user name, password, and logon domain

    Once you are connected to the network, you can minimize your connection window and use e-mail, Windows Explorer, and so on.

To disconnect from the network

3   Open       Network and Dial-up Connections.
4   Right-click the connection you want to disconnect, and then click **Disconnect**

# To use Commands without help of mouse

**Keyboard Shortcuts**: - All windows programs share lots of keyboard shortcuts. (In these shortcuts, don't hit the + button – it's there tell you that you've to use the two keys together to achieve the result.

| | |
|---|---|
| Ctrl + A | Select all the content in the document |
| Ctrl + B | Bold |
| Ctrl + C | Copy the selected part |
| Ctrl + D | Fonts |
| Ctrl + E | Center align |
| Ctrl + F | find anything in the document |
| Ctrl + G | Go to |
| Ctrl + H | Replace |
| Ctrl + J | Justify |
| Ctrl + K | Insert Hyperlink |
| Ctrl + L | Left align |
| Ctrl + M | Increase Indent |
| Ctrl + N | Open a new document in the program |
| Ctrl + O | Opens the Open file dialog box. |
| Ctrl + P | Prints the document |
| Ctrl + R | Right align |
| Ctrl + S | Save the file |
| Ctrl + U | Underline |
| Ctrl + V | Pastes the cut or copy part. |
| Ctrl + W | Close Windows |
| Ctrl + X | Cuts the selected part |
| Ctrl + Y | Redo |
| Ctrl + Z | Undo Typing |

| | |
|---|---|
| Shift + F10 | To get Right – Click menu |
| Alt + Tab | Shifting between Windows |
| Alt + Spacebar + N | To Minimize a windows |
| Alt + Spacebar + X | To Maximize a windows |
| Alt + F4 | close the program |
| Shift + F7 | Thesaurus |
| F7 | Spelling and grammar check |
| Del | Clear the selected part |
| Ctrl + Page Up | Cursor up one page |
| Ctrl + Page Dn | Cursor down one page |
| Ctrl + Enter | Insert Page |
| Ctrl + F4 | Closes the document |

## How do you move around a Dialog Box?

1. Just hit Tab --- You'll see the selection move from one button / drop-down list/text box to the next.
2. Hit Enter when you want to select in, or the arrow keys to go through drop-down lists.
3. If You want to reverse the direction (Go back) :--- Shift + Tab

## How do you work the desktop?

1. Use the Tab key to click in and click out
2. Use the arrow key to move around the icon on the desktop
3. Shift + F10 to right click.

## Internet WWW Glossary

A - B - C - D - E - F- G H- I- J - K- L- M - N - O
P - Q - R - S - T - U - X Y - V - W - Z

## A

**Adaptive palette:**
Image-specific set of colors chosen to most closely represent those in the
original source  Part of a custom color look-up table

**Additive Colors:**
Red, Green, and Blue are referred to as additive colors
Red+Green+Blue=White

**Adobe Systems, Inc:**
A software applications company located in Mountain View, CA, known for
PhotoshopTM, TypeManagerTM and IllustratorTM

**Algorithm:**
The specific process in a computer program used to solve a particular problem

**Aliasing**
An effect caused by sampling an image (or signal) at too low a rate  It makes
rapid change (high texture) areas of an image appear as a slow change in the
sample image  Once aliasing occurs, there is no way to accurately reproduce
the original image from the sampled image

**Alpha Channel:**
An additional 8bit channel, used by some editing softwade for masking or
additional editing applications

**Anti-aliasing:**
The process of reducing stair-stepping by smoothing edges where individual
pixels are visible.

**Apple Talk:**
The Local Area Networking system introduced by Apple Computer

**Architecture:**
The basic design of a computer system, its circuitry, microprocessor, memory,
etc ,and its connectivity of components.

**Archive**  Long-term storage of data or images. Archiving is generally
accomplished on some form of magnetic media; such as disk or tape, or optical
media, such as Writable CD.

**Array Processor:**

A POrtion of Large computer system that assist processing data fast  Several
Operation simultaneously

**Artifacts:**
Visual effects introduced into a digital image in the course of scanning or
compression that do not correspond to the image scanned

**Artificial Intelligence:**
The use of computers to solve problems the way human being does.

**ASCII ·**
An acronym for the American Standard Code for information Interchange,
which convertskeyboard input into digital information  It covers all the
printable and control characters.

**Aspect ratio:**
In computer graphics, the images' relationship of width to height must be kept
thesame when it is displayed on several screens

**ATM·**
Adobe utility program that improves a computer monitor's dysplay of type at
any size

**AV**
A Generic term used to deal with animation, audio and video

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**B** TOP of the PAGE

**Background processing:**
Concurrent processing work performed by the computer to carry out
theinvestigative instructions of the operator while other activities are being
performed.

**Banding**
An artifact of color gradation in computer imaging, when graduated colors
break into larger blocks of a single color, reducing the "smooth" look of a
proper gradation

**Bandwidth**
The transmission capacity of a communications channel, usually expressed in
bits or bytes per second (the former is also called baud rate)

**Barrel Distortion:**
Image distortion that spread the center dimensions of the image

**Base resolution:**
The Photo-cd image resolution [512x768 pixels] formatted to be displayed on
TV

**4 BAse**
THe 1536 x 1024 pixels image ideal for high definition TV

**16 Base:**
The 2048 x 3072 pixels image suitable for diGital Imaging

**64 Base:**
Max resolution for Photo-cd The 4000 x 6000 pixels image produces a 72 MB image File.

**Bezier curve**
A mathematically defined curve made up of four points, two ends and two in between, that affect its shape.

**Baud rate:**
The speed at which computer data can be transmitted via modem  Example. Modem rates may be 1200, 2400 and 9600 baud. To determine the number of bytes transferred per second - divide the baud rate by 8.

**Batch Processing:**
A Method that allows for repetitive processing of groups of data by executing only one command

**BBS:**
Bulletin Board System, a system that allows Computer 2 computer communication via modem to exchange and copy files

**Bi-cubic interpolation:**
A Matrix for comparison of central pixels to surrounding pixels

**Binary:**
A coding or counting system with only two symbols or conditions (off/on, zero/one, mark/space, high/low)  The binary system is the basis for storing data in computers

**Bit Depth:**
The amount of tone data per sample expressed in number of bits  Typical bit depths are 1 for line are, 8 for grayscale and 24 for color images

**Bit**
A binary digit, a fundamental digital quantity representing either 1 or 0 (on or off)

**Bitmap**
An image made up of dots, or pixels. Refers to a raster image, in which the image consists of rows or pixels rather than vector coordinates

**Blanding:**
Stair-stepping of shades in a gradient or on the blend.

**Blur**
The art of softening the detail of a digital image. The process can be applied selectively to portions of an image.

**Bordering:**
Automatically locating the correct edge of an image on a scan so that marking from the edge, frame, etc. is not captured.

**Brightness:**
The value of a pixel in an electronic image, representing its lightness value from black to white Usually defined as brightness levels ranging in value from 0 (black) to 255 (white)

**Buffer**
A special area set aside either in hardware or software for temporary. Usually, the bigger the buffer, the faster the computer can process other data

**Bundling** Combining two or more different functions into one expansion board or peripheral device Also combining software "bundled" with hardware.

**Byte·**
An ensemble of eight bits of memory in a computer.

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C TOP of the PAGE

**Cache** - A temporary storage area for information which locates itself between the hard disk and the RAM by employing intuitive logic It also speeds up the access time of the data

**Calibration**
The setting of computer system components to a standard which will produce the same readable results on each unit, i.e., color calibration is necessary in the workstation to achieve the same results on the output

**Canvas·**
The entire image displayed on the monitor, but not necessarily at full resolution

**CCD:**
Charged-Coupled Device. A light sensitive electronic device that emits an electrical signal proportional to the amount of light stricking it Used in scanners and video cameras

**CCD array**
A device that mounts many CCDs together to allow for capture of many pixels at the same time.

**CD-ROM**
Compact Disc-Read Only Memory A CD-ROM drive uses the CD (compact disc) format as a computer storage medium One CD can store 640 megabytes of data and other mixed media on a disc about the size of a traditional 5-1/4-in floppy disk

**CD-R**
Compact Disc Recordable writes data to discs, which can then be read by standard CD-ROM drives

**CGM :**
Computer Graphics Metafile. An image file format designed to handle a wide
range of image types, but currently used primarily for vector graphics

**CIE**
Commission Imnternational l'Eclairage.
An international standard committee that defined the de facto standard color
model used in all color management systems

**Client/Server Architecture:**
A systems architecture design that divides functions (which might be part of a
single application) between two or more computers  The client is the machine
that requests information, the server is the machine that supplies it  A typical
client/server architecture for imaging might allow a server to store and transmit
a compressed file, and the client to decompress, process, and display the image

**CLUT**
Color Lookup Tables - A color referencing system

**CMS**
Color Management System.
A comprehensive hardware/software solution of maintaining color fidrlity of an
image from scanner to monitor to printer

**CMY (Cyan, Magenta, Yellow).**
The three subtractive color primaries

**CMYK (Cyan, Magenta, Yellow, Black):**
One of several color encoding system used by printers for combining primary
colors to produce a full-color image  In CMYK, colors are expressed by the
"subtractive primaries" (cyan, magenta, yellow) and black  Black is called "K"
or keyline since black, keylined text appears on this layer

**Calibration:**
The act of adjusting the color of one device relative to another, such as a
monitor to a printer, or a scanner to a film recorder. Or, it may be the process
of adjusting the color of one device to some established standard.

**Color Cast:**
The effect of one color dominating the overall look of an image. Often caused
by improper exposure, wrong film type, or unusual lighting conditions when
shooting the original image. Also caused, when scanning, by the sometimes
unpredictable interaction between an image and a scanner

**Color curves:**
A mechanism for controlling color changes, and matching colors  Color curves
are set by user-adjustable lookup tables that define a color transform, which
may be applied to each primary additive or subtractive color in the image.

**Color Gamut:**
Any color medium representing its own range of color, including film, a
monitor, printed images or the human eye

**Color proof:**
Proofs may be in-house for checking composition, or a representation of the final print for client OK. Common types are CromalinTM, MatchPrintTM, inkjet, dye sublimation and laser copies.

**Color Separation:**
An image that has been converted or "separated" from RGB into the four process colors. See CMYK

**Composite (Comp):**
A term for combining images, artwork, lineart and type

**Compression:**
The reduction of data to reduce file size for storage. Compression can be "lossy" (such as JPEG) or "lossless" (such as TIFF LZW). Greater reduction is possible with lossy compression than with lossless schemes

**Contrast:**
A measure of rate of change of brightness in an image ---HIGH contrast implies dark black and bright white content; ---MEDIUM contrast implies a good spread from black to white, ---LOW contrast implies a small spread of values from black to white. Crop· To permanently discard unwanted information in the perimeter area of an image

**CPU/ Central Processing Unit:**
A large chip which holds the "brains" of the computer

D TOP of the PAGE

**DAT:**
Digital Audio Tape format is a mini tape format for image storage and backup

**DPI (Dots Per Inch):**
The measurement of resolution of a printer or video monitor based on dot density. For example, most laser printers have a resolution of 300 to 600 dpi, most monitors 72 dpi, most PostScript imagesetters 1200 to 2450 dpi. The measurement can also relate to pixels in an input file, or line screen dots (halftone screen) in a prepress output film

**Default:**
The setting in a computer program which will take effect if no changes are made.

**Density:**
The measure of light blocking (in the case of transparencies) or absorption (in the case of prints), expressed logarithmically. Typical slides have a density of 3 0 while typical prints have a density of 2 0

**Digital:**
A system or device in which information is stored or manipulated by on/off impulses, so that each piece of information has an exact or repeatable value

(code).

**Dithering.**
A technique of using patterns of dots or pixels to create the effects of an intermediate tonal value

**DIF·**
Data Interchange Format, a standard for access between programs

**Digital Camera:**
A camera that directly captures a digital image without the use of film

**Disk cach**
Improves performance of disk controller via high-speed memory.

**Distortion**
Changing the size of an image in a non-proportional manner  Also known as "anamorphic scaling " Dither - The process of adding dots to a small area in order to smooth out the appearance of an image, or specifying colors to adjacent pixels in order to simulate intermediate colors in a bit mapped image

**DTP:**
Acronym for desktop publishing, including typesetting, image handling and page composition

**Dynamic Range:**
The color depth (or possible pixel values) for a digital image  The number of possible colors or shades of gray that can be included in a particular image  8-bit images can represent as many as 256 colors, 24-bit images can represent approximately 16 million colors

**Dot Gain:**
The effect of ink spread and absorption into paper during printing resulting in darker tones, especially midtones.

**Download:**
The transfer of information from one computer to another  Frequently used to describe file transfer from a network file server to a personal computer.

**Driver:**
A software utility designed to tell a computer how to operate an external device  For instance, to operate a printer or a scanner, a computer will need a specific driver

**D-RAM**
Dynamic Random Access Memory - a computer memory device offering high data packing density and data rates. Also Dram chips for PCs

**Drop Shadow:**
A graphic art effect designed to simulate the shadow cast by three dimensional shapes

Drum Scanner

A high-end scanning device, utilizing PMT technology, used to digitize prints, transparencies, and artwork.

## E TOP of the PAGE

**Element**
A image, or line art, in whole or part of the page, composite or file

**Elliptical Dot:**
A halftone screen dot that can produce better tonal gradations than a circular dot. Emboss - Usually done photo-mechanically, but some EIM & CEPS systems can accomplish the process in seconds

**Emulsion:**
Coating on the light-sensitive material  The opposite side of the base

**Environment:**
Every computer works within a netware or software surrounding  The condition in which a computer operates. Also, an operating system used to support another operating system is an "environment "

**EPS:**
Encapsulated PostScript  A subset of the PostScript page description language that allows any single-page artwork, be it line art or image data, to be saved and placed into any other EPS compatible document.

**Ethernet:**
A networking system providing transfer of data between computer systems and peripherals over a coaxial link

**Export:**
The process of transporting data from one computer, program, type of file format, or device to another

## F TOP of the PAGE

**Feathering·**
The process of merging borders, or softening the edge around a mask

**Fiber optics:**
Very thin cables used in transmitting data

**File:**
A named collection of binary information stored as an apparent unit on a secondary storage medium such as a computer disk drive  Film Recorder  A device that is used to record a digital image onto photosensitive film

**Film recorder drum:**
The highest quality film recorder  They may be sheet- or roll-fed with exposure via white light or laser. It is possible to image on negative or positive film plus

photographic print material

**Flash Memory:**
A type of memory chip that can retain data after the system has been turned off Its advantage is that digital cameras with flash memory can have batteries go "dead" and yet retain image data

**Flat Bed Scanner:**
An optical scanner in which the orginal image remains stationary while the sensors (usually a CCD linear array) passes over or under it. The scanned material is held flat rather than being wrapped around a drum

**FTP File transfer protocol:**
A method of moving or transferring files between computers on the Internet

G TOP of the PAGE

**GIF File Format :**
Stands for Graphic Interchange Format, a raster oriented graphic file format developed by CompuServe to allow exchange of image files across multiple platforms

**Gamma Correction:**
The measure of contrast that results in lightening or darkening the midtone regions of an image Also, the amount midtones need to be adjusted on a monitor

Gaussian brush
A brush with variable density.

Gigabyte (GB).
A measure of computer memory or disk space consisting of about one thousand million bytes (a thousand megabytes) The actual value is 1,073,741,824 bytes (1024 megabytes)

GPIB Interface·
Graphic Port Interface Bus - A standard interface in the graphic arts for graphic computers and peripherals.

Gradient.
A smooth spread between colors

Gray Scale
A term used to describe an image containing shades of gray as well as black and white.

GUI
Graphical User Interface - a computer control system whereby the operator commands the computer with a mouse or stylus

H <u>TOP of the PAGE</u>

Hacker·
Slang for a non-professional dedicated computer operator

Halftone Image
An image reproduced through a special screen made up of dots of various sizes
to simulate shades of gray in a photograph. Typically used for newspaper or
magazine reproduction of images

Hard copy·
Refers to a print or proof, as opposed to viewing on a monitor.

HDTV
High-Definition Television - The coming system - at least double the resolution
we have today.

HTMLHypertext Markup Language .
An encoding format for identifying and linking electronic documents used to
deliver information on the World Wide Web

Histogram
A graphic representation of the number of samples corresponding to each tone
in an image

HPGL
Hewlett-Packard Graphics Language

Hue·
A term used to describe the entire range of colors of the spectrum, hue is the
component that determines just what color you are using  In gradients, when
you use a color model in which hue is a component, you can create rainbow
effects

I <u>TOP of the PAGE</u>

Imagepac
File storage format used with Kodak's PhotoCD

Imagesetter:
Output devise to image onto separation film  They are the preferred PostScript
compatible and non-PostScript devices

Image Processing:
Capturing and manipulating images in order to enhance or extract information
Image Resolution  The number of pixels per unit lenght of image. For example,
pixels per inch, pixels per millimeter, or pixels wide

Import:
The process of bringing data into a document from another computer,
program, type of file format, or device

Ink-Jet Printer.
An inexpensive alternative to a laser printer, an ink-jet printer forms text and images out of dots created by jets of ink. Color ink-jets support many different media sizes and output resolutions.

Interpolation.
The technique of estimating the tonal value that lies between two known tone samples Used for enlarging an existing image. Also used when caputring an image during the scanning process to acdieve higher than optical resolution

ISA  A 16-bit bus for PCs

J TOP of the PAGE

JPEG Compression
A file compression standard established by the Joint Photographic Experts Group that uses a combination of DCT and Huffman encoding to compress images JPEG is a "lossy" compression algorithm, meaning that it slightly degrades image quality.

Jaggies
Another word for stair-stepping or staircased edges of a raster or vector image This problem can appear when low-resolution files are blown up to large sizes Jaggies

K TOP of the PAGE

Kilobyte.
An amount of computer memory, disk space, or document size consisting of approximately one thousand bytes Actual value is 1024 bytes

L TOP of the PAGE

LAN (Local Area Network)·
A communications network that's physically connected by cables and confined to a single office or a single building It enables a group of computers to exchange files and share peripherals. LPI (Lines Per Inch) The frequency of horizontal and vertical lines in a halftone screen.

LZW
Lempel-Ziv-Welch. A popular, lossless image compression algorithm

Laser Printer
A printer using laser copier technology to produce high-quality printed material from computer data. The laser charges an electrostatically sensitive drum to accept carbon based toners. The toner is then transferred and fused to paper or transparency material

Line Art

Images comprised of only pure black-and-white data. Also a mode of capturing such images.

Lossless Compression:
Reduces the size of files by creating an internal shorthand that rebuilds the data as it originally were before the compression Thus, it is said to be non-destructive to image data when used.

Lossy Compression:
A method of reducing image file size by throwing away unneeded data, causing a slight degradation of image quality JPEG is a lossy compression method.

M TOP of the PAGE

Mask:
A temporary stencil restricting the action of various functions to a selected area within the picture or page Masks can be created by drawing points around an element or automatically by specific density or hue values.

Megabyte (MB).
An amount of computer memory consisting of about one million bytes The actual value is 1,048,576 bytes.

Midtone·
The range of tones in an image located approximately halfway between highlights and shadows

MIME:
Multi-purpose Internet Mail Extensions A standard for embedding multimedia data in e-mail messages

Modem (MODulator/DEModulator).
A device that converts digital computer data into signals for transmission over telephone lines

Moire.
A visible pattern that occurs when one or more halftone screens are misregistered in a color image

MPEG.
An image compression method for motion picture files

N TOP of the PAGE

Network
A group of computers connected to communicate with each other, sharing resources and peripherals

Newsgroup.
An Internet discussion group devoted to a particular topic

Newton Rings
A pattern of concentric, multi-colored rings occasionally introduced in a
scanned image by contact of transparency film with the glass platen in a
scanner

NuBus
Communications interface used in Macintosh computers to transfer video data
from memory to the graphics display card

O TOP of the PAGE

Obj

## Regional Institute of Education, Ajmer.
### Department of Extension Education – PAC 15.16
"Training programme in Computer basics of DIETs and IASE of Rajasthan"

● Time Table ●

| Day | Date | 9.30am – 11:00am | 11:00am – 11:15am | 11:15am – 12:45pm | 12:45 pm – 2:00 pm | 2:00pm – 3:45pm | 3.45pm – 4.00pm | 4:00pm – 5:30pm |
|---|---|---|---|---|---|---|---|---|
| Monday | 06-10-03 | Registration + Introduction objectives of the program | TEA BREAK | What is Computer? How it works? | L U N C H | Multimedia presentation (How Computer works) | T E A   B R E A K | Computer practical (How to start& shutdown a computer) |
| Tuesday | 07-10-03 | About Windows operating system | | Internet How it works? | | Practical (Windows) | | Practical (Windows) |
| Wednesday | 08-10-03 | Introduction to DOS Commands | | Internet | | Practical (DOS) | | Practical (DOS) |
| Thursday | 09-10-03 | Introduction to MS-Word (Word processing software) | | Internet | | Practical (MS-Word) | | Practical (MS-Word) |
| Friday | 10-10-03 | MS-Word advanced set up | | Internet Email | | Practical (MS-Word) | | Practical (MS-Word) |
| Saturday | 11-10-03 | Visit to Mayo College to study the IT classroom and use of V-Sat. | | | | Practical (MS-Excel) | | Practical (MS-Excel) |
| Sunday | 12-10-03 | Introduction to Excel Spreadsheets (Theory) | TEA BREAK | Introduction to (Statistical package) SPSS Exercises on PowerPoint | | Practical (MS-Excel) | | Practical (MS-Excel) |
| Monday | 13-10-03 | Introduction to PowerPoint (Theory) | | Internet | | Practical (PowerPoint) | | Practical (PowerPoint) |
| Tuesday | 14-10-03 | What is Multimedia? & it use | | Internet | | Practical on Internet (Multimedia) | | Practical on Internet (Multimedia) |
| Wednesday | 15-10-03 | Presentation of project work by participants | | Presentation of project work by participants | | Practical on E-Mail - (Multimedia) | | Valedictory |

Faculty Members:- Dr. K.B. Rath (KBR)
Dr S.K Paradkar (SKP)
Mr. B.C Kumawat (BCK)

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